

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**



In re application of:

Applicants : Mark C. Schmidt et al.  
Application Serial No.: 10/630,622  
Filing Date: : July 30, 2003  
Title: WIRELESS LASER SCANNING BAR CODE SYMBOL  
READING SYSTEM, WHEREIN THE RF-BASED  
TRANSCIVER CHIPSETS WITHIN THE WIRELESS HAND-  
SUPPORTABLE UNIT AND BASE STATION THEREOF ARE  
AUTOMATICALLY DEACTIVATED AND...  
Examiner : n/a  
Group Art Unit : 2876  
Attorney Docket No. : 108-194USANB0

Honorable Commissioner of Patents  
and Trademarks  
Washington, DC 20231

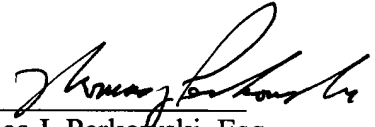
**SUBMISSION OF FORMAL DRAWINGS**

Sir:

Transmitted herewith please find One Hundred Sixty One (161) sheets of Formal Drawings to be filed in the above referenced Application.

Respectfully submitted,

Dated: March 1, 2004

  
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Thomas J. Perkowski, Esq.

Reg. No. 33,134

Date: March 1, 2004

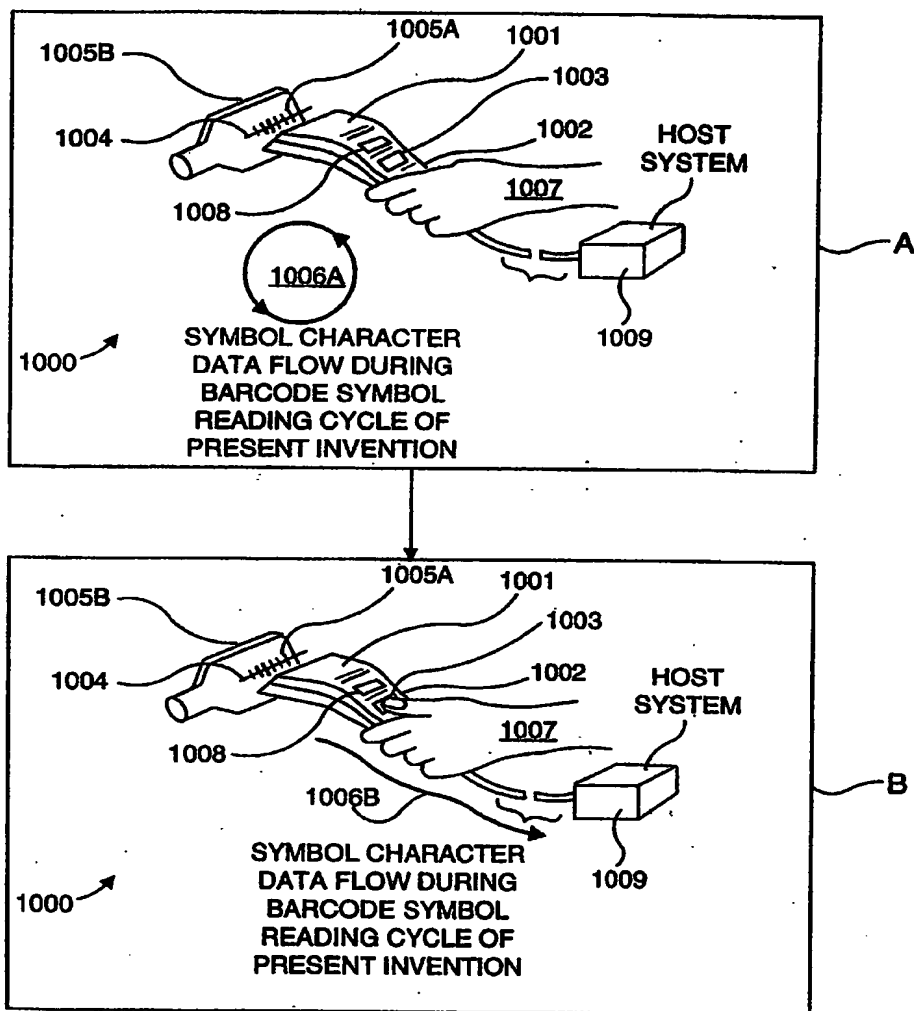
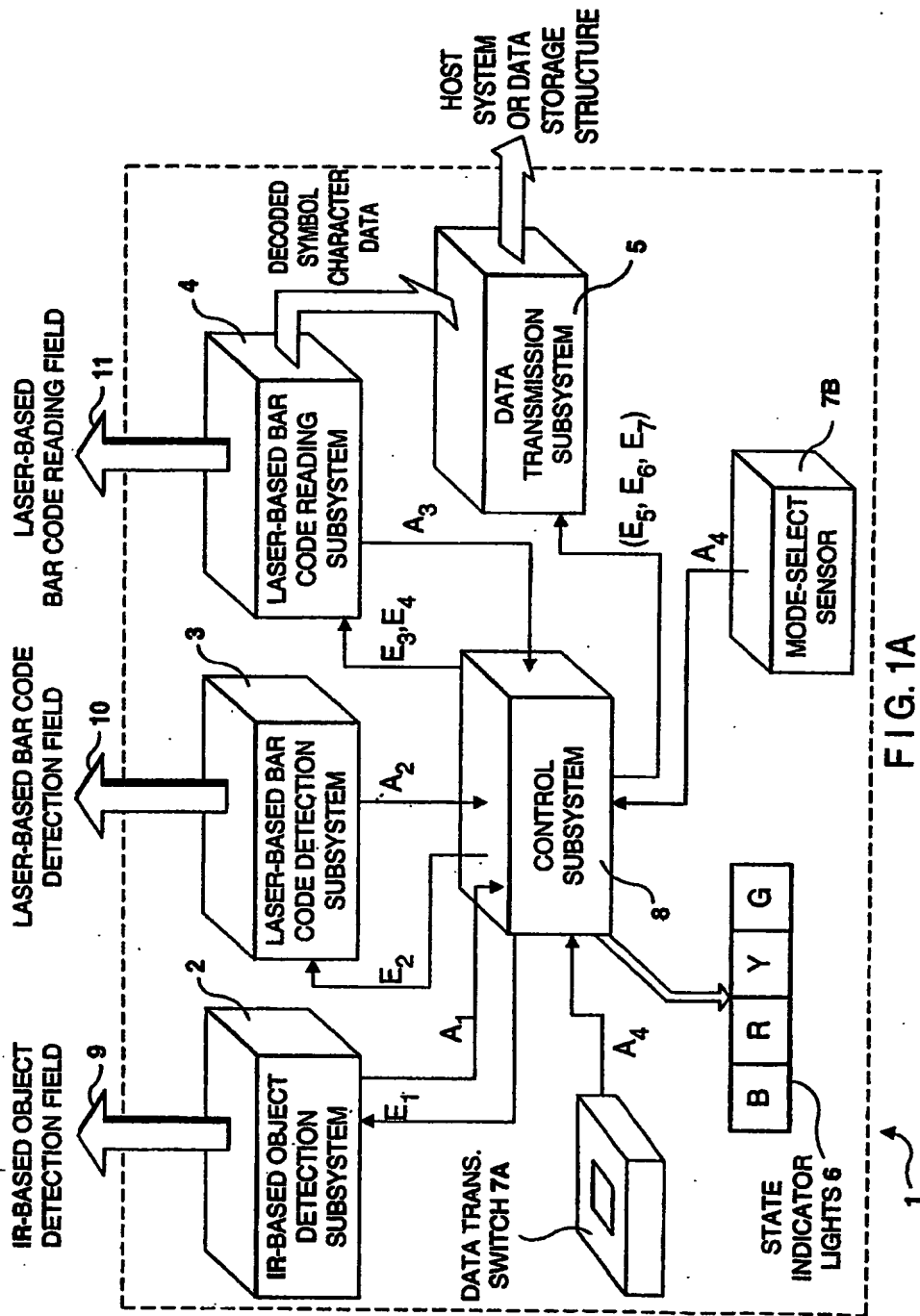
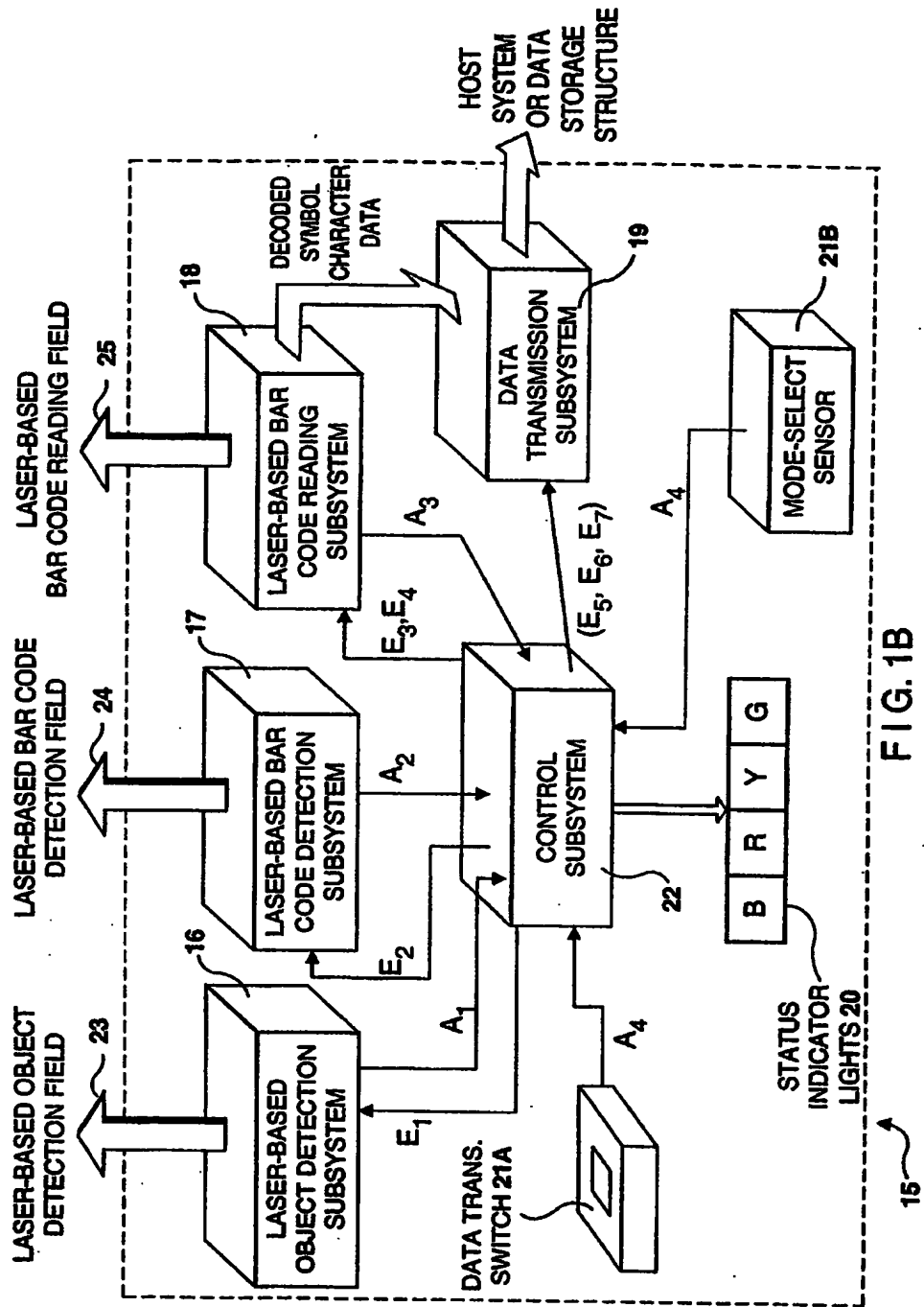


FIG. 1





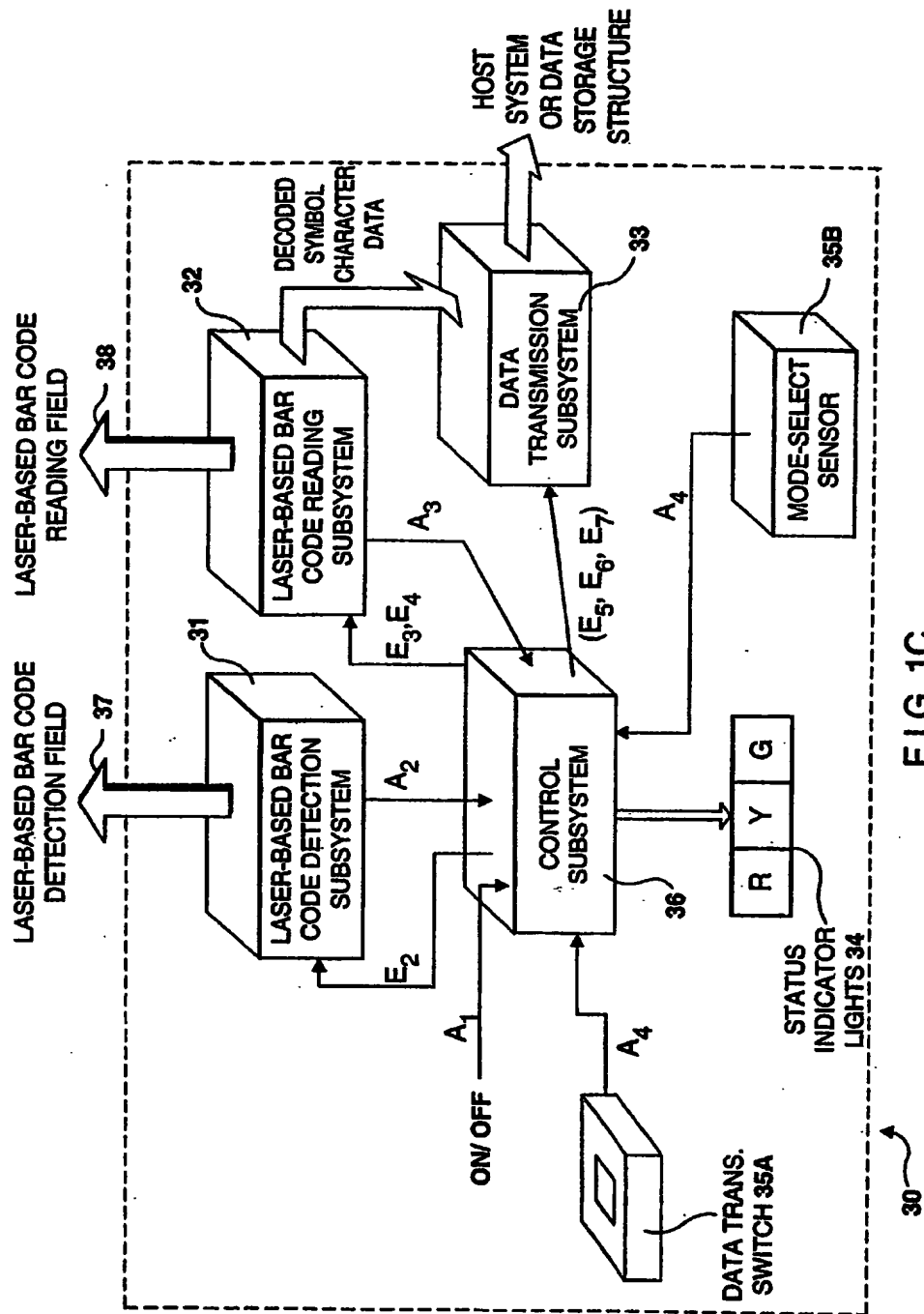


FIG. 1C

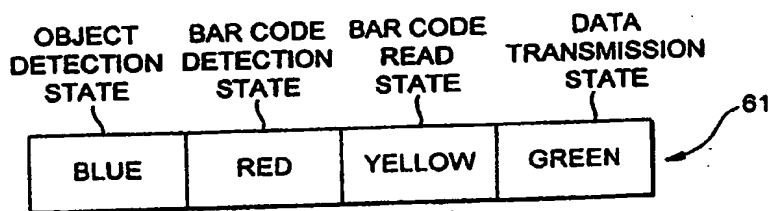
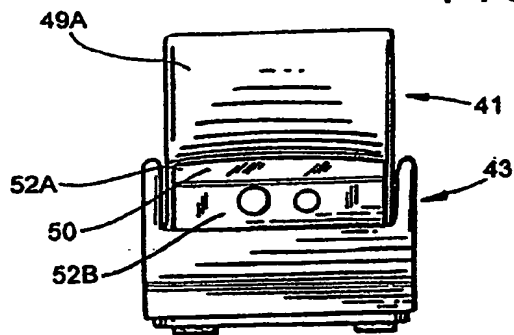
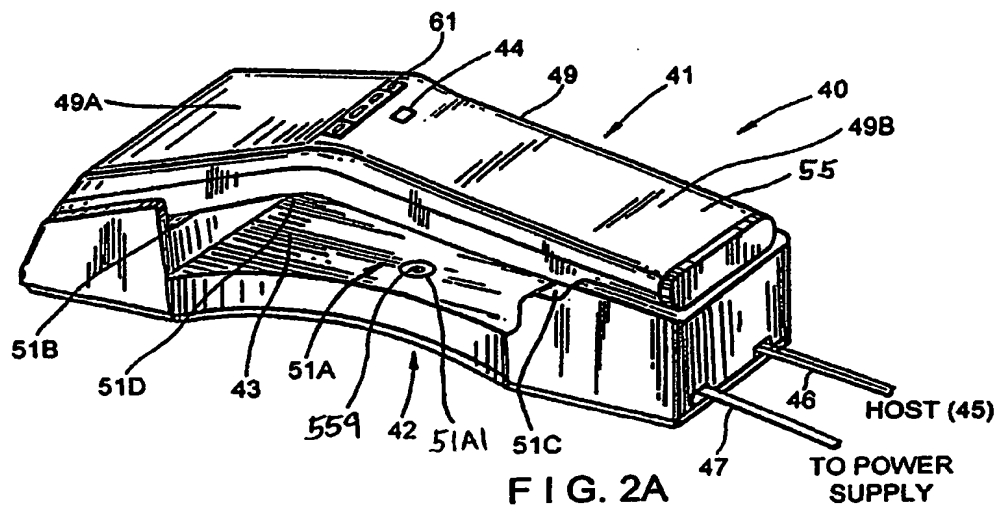
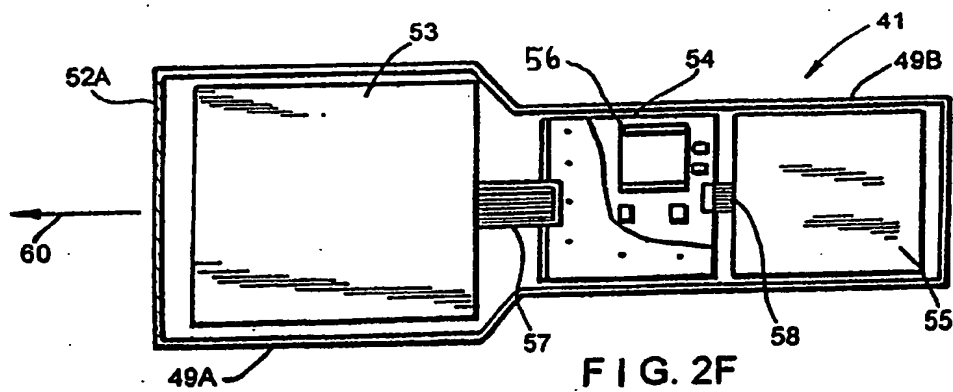
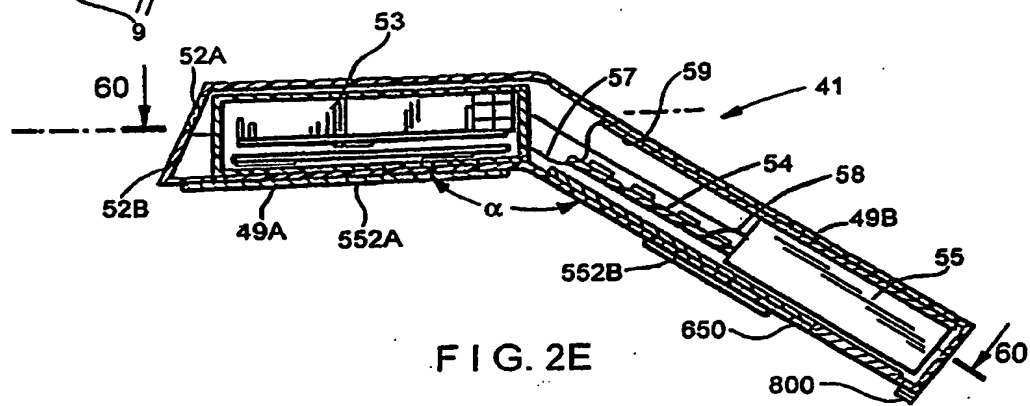
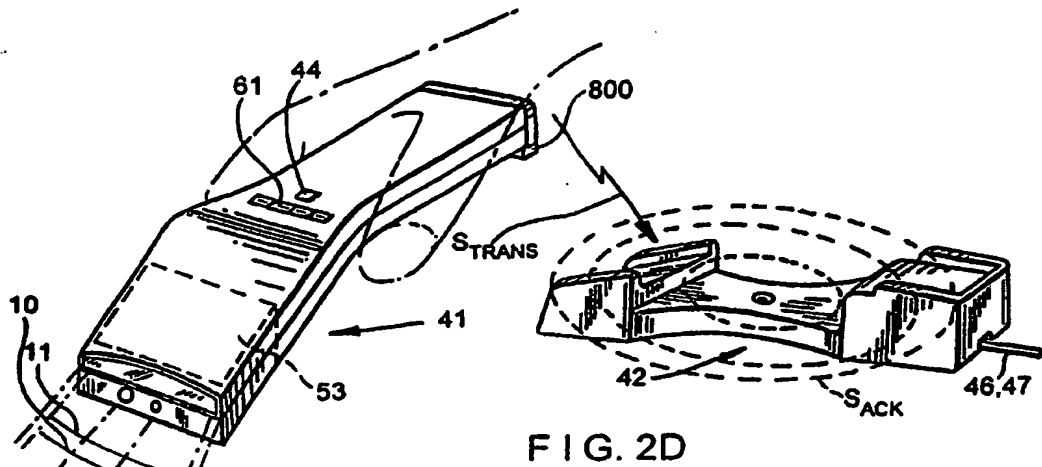


FIG. 2C





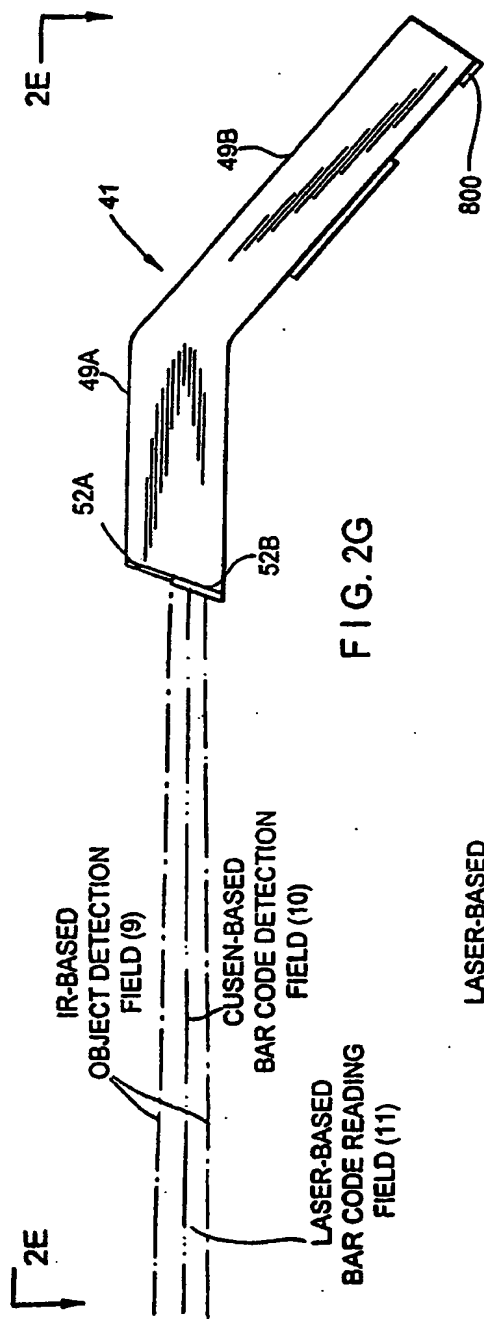


FIG. 2G

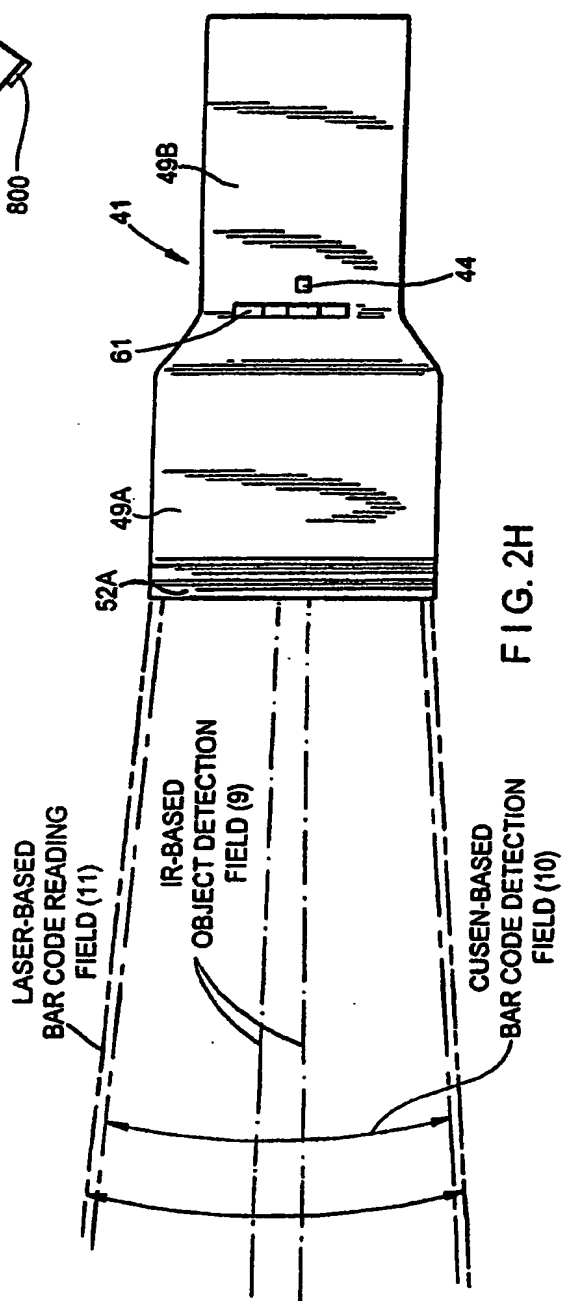
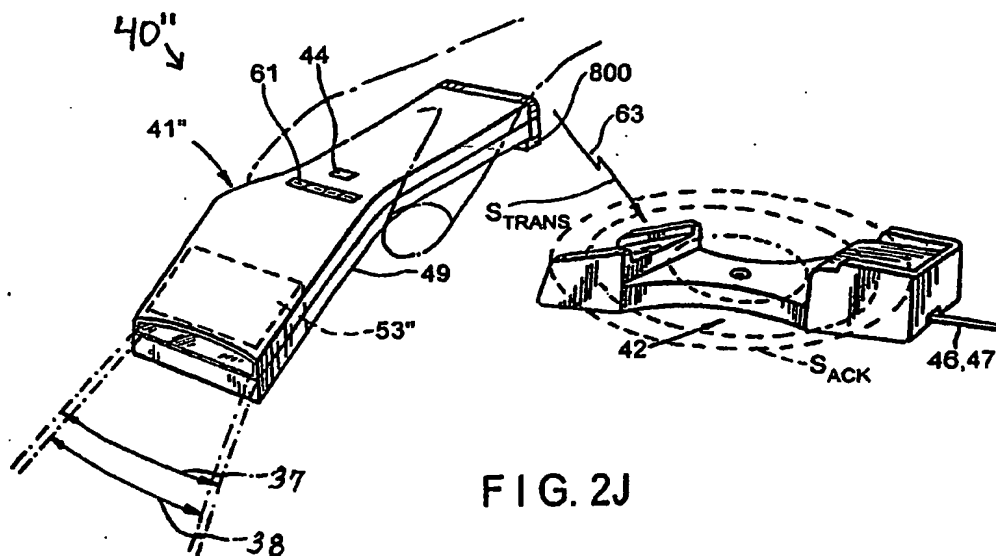
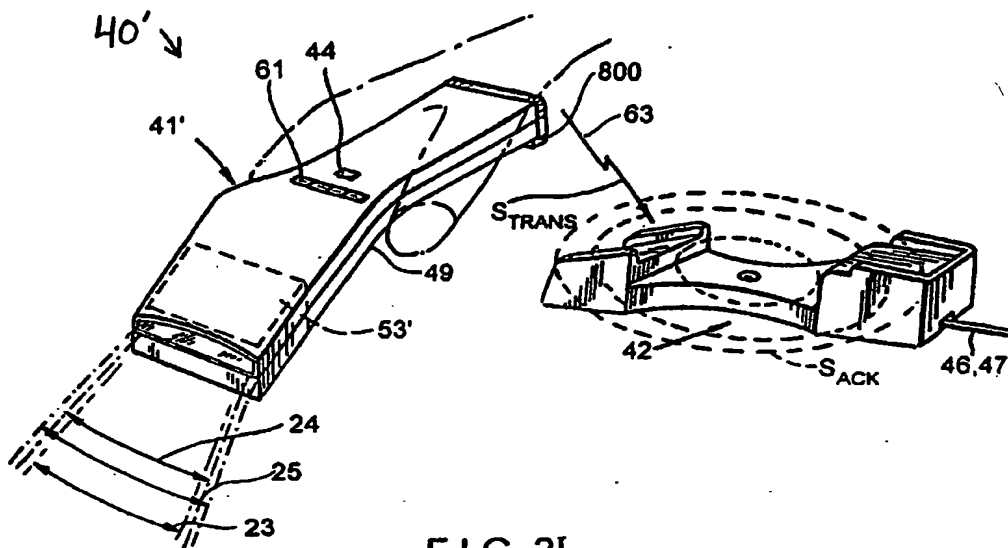
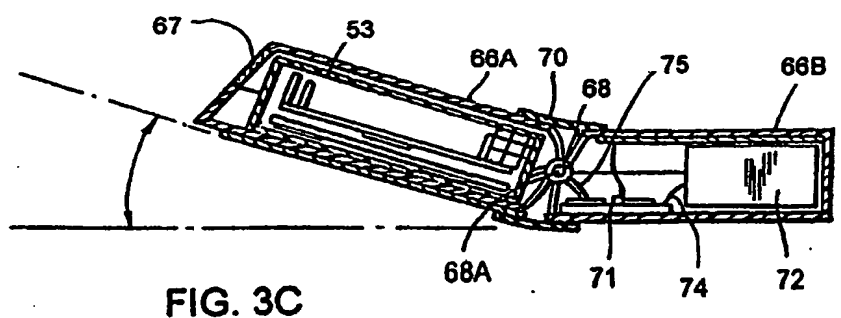
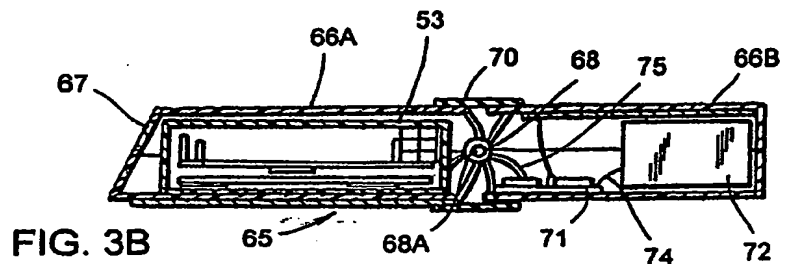
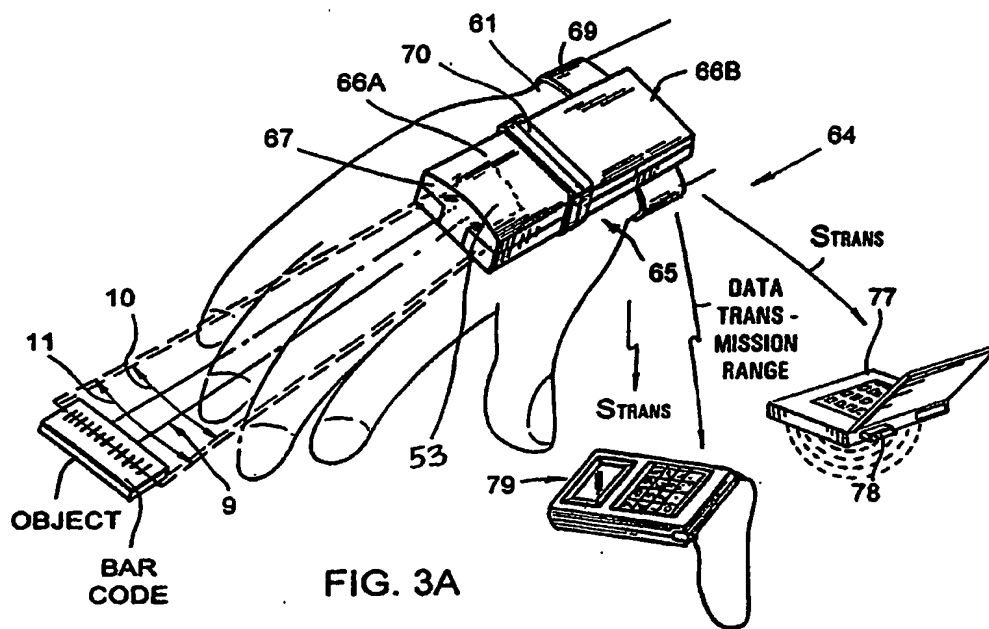
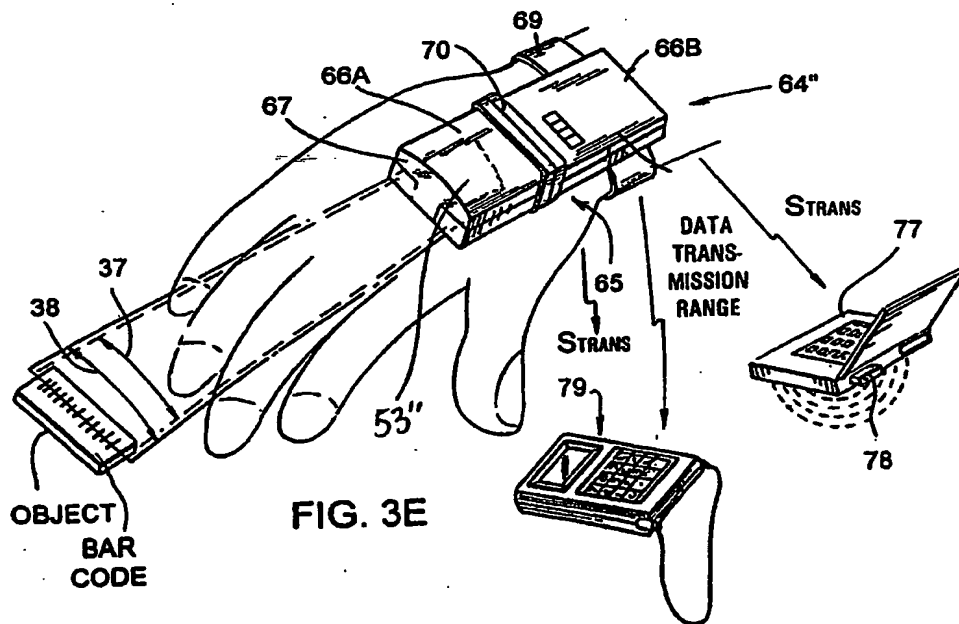
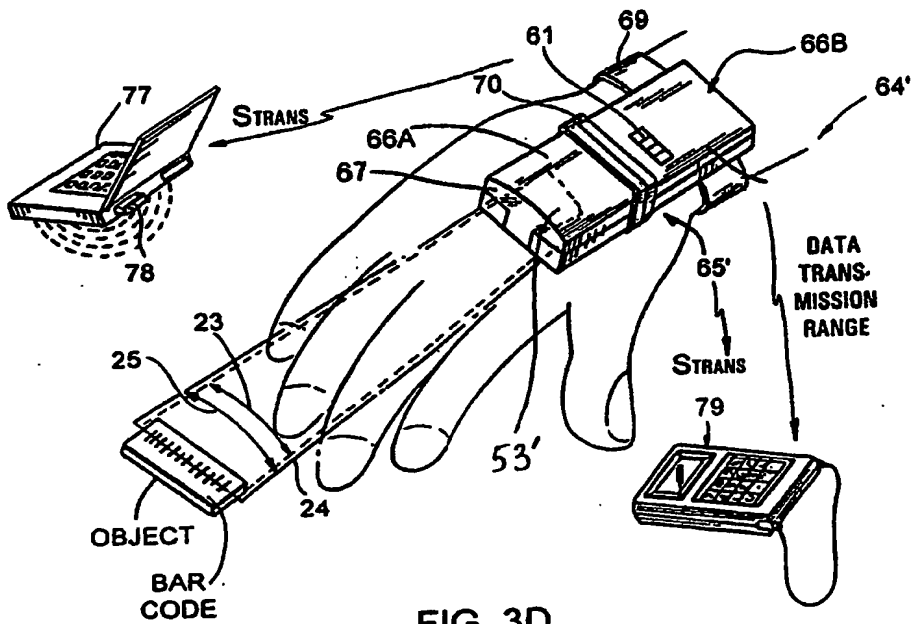
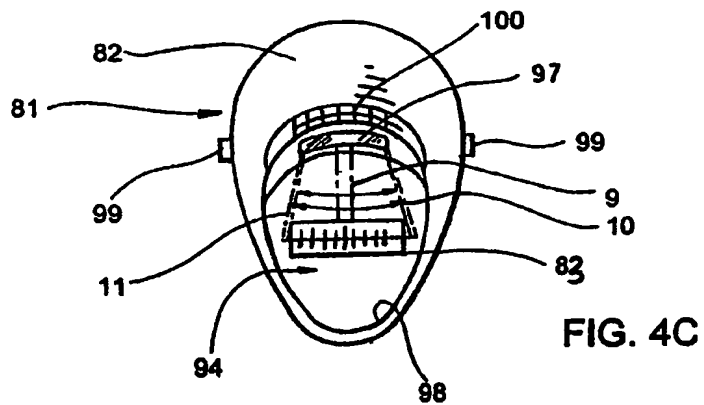
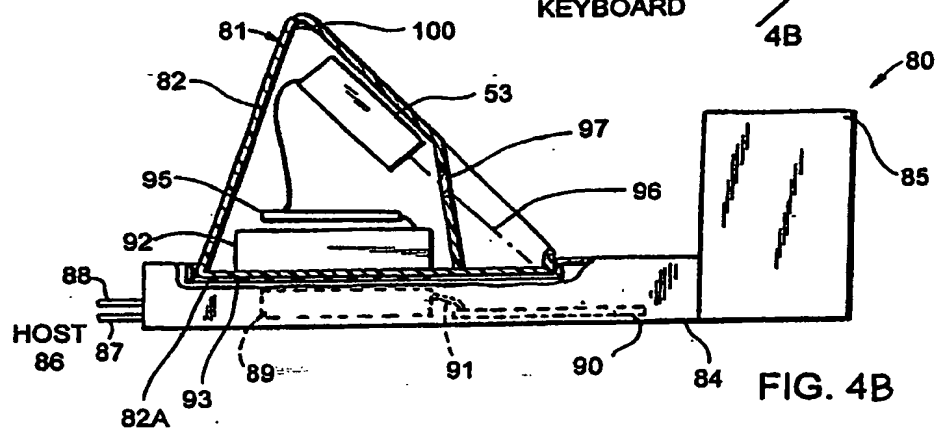
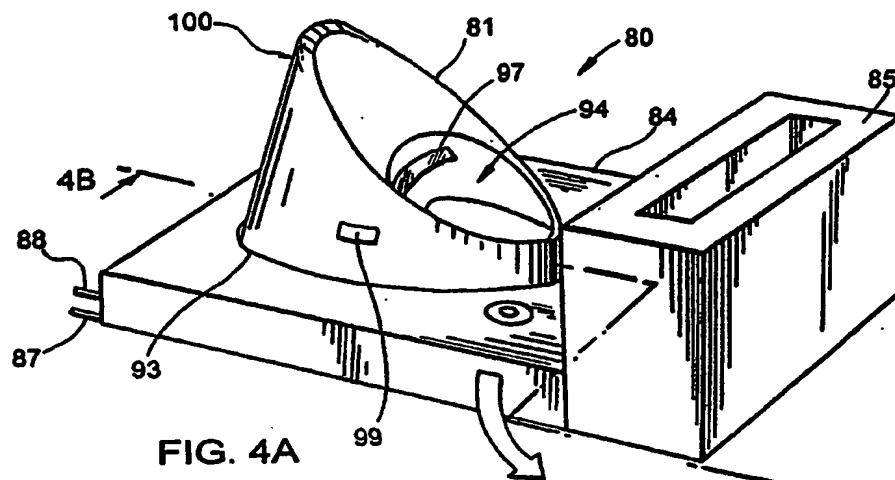


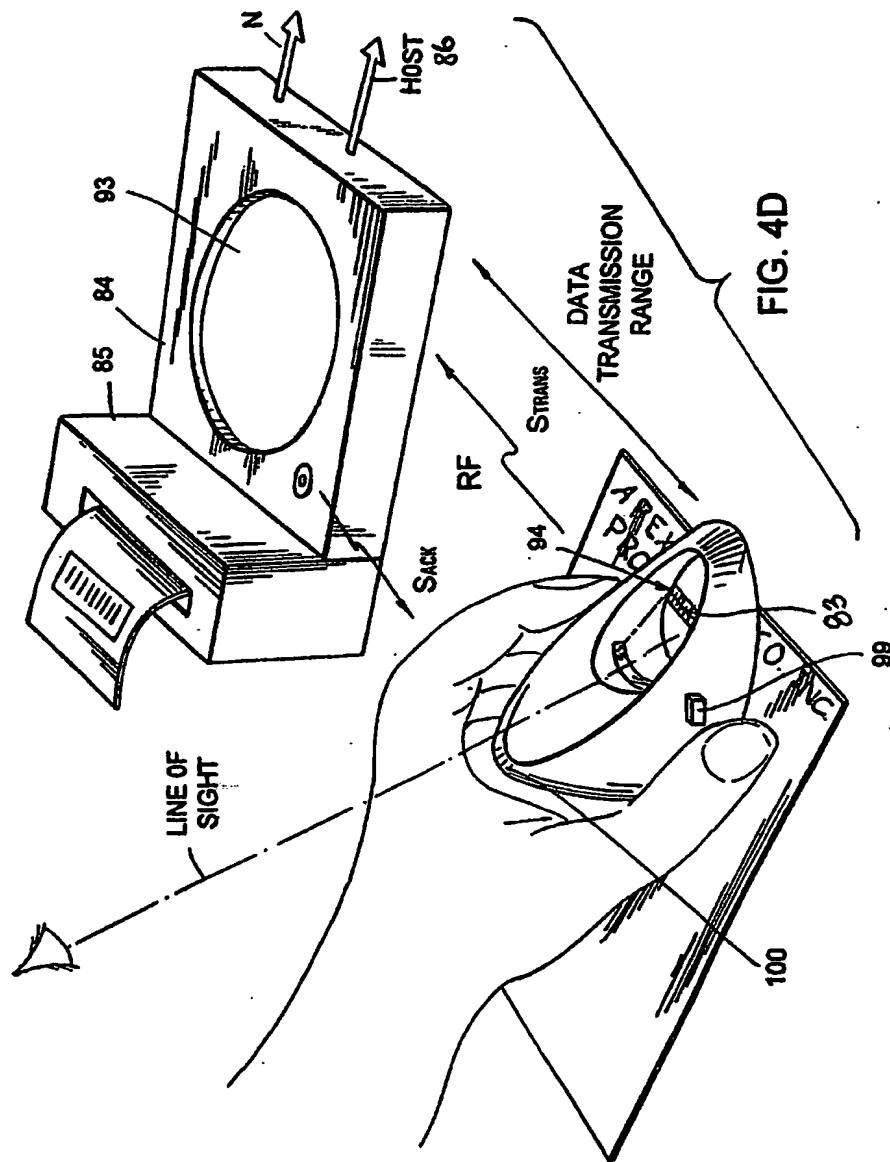
FIG. 2H











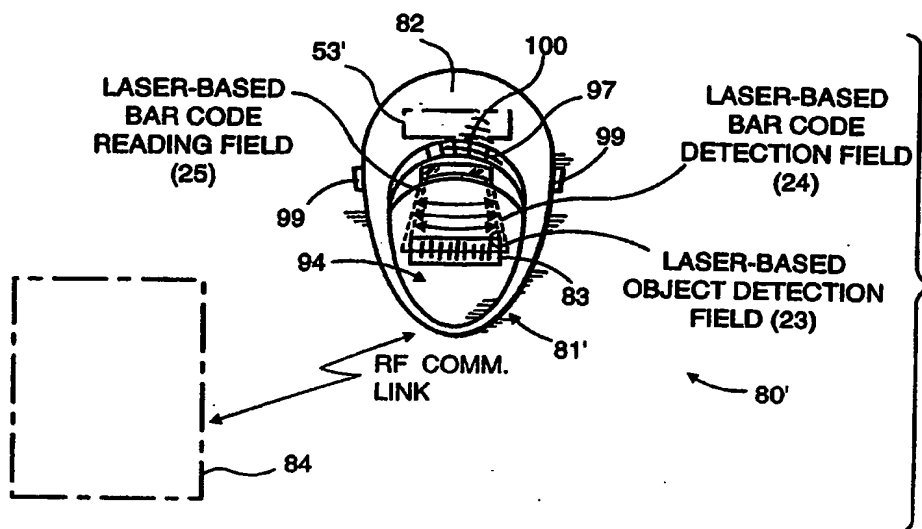


FIG. 4E

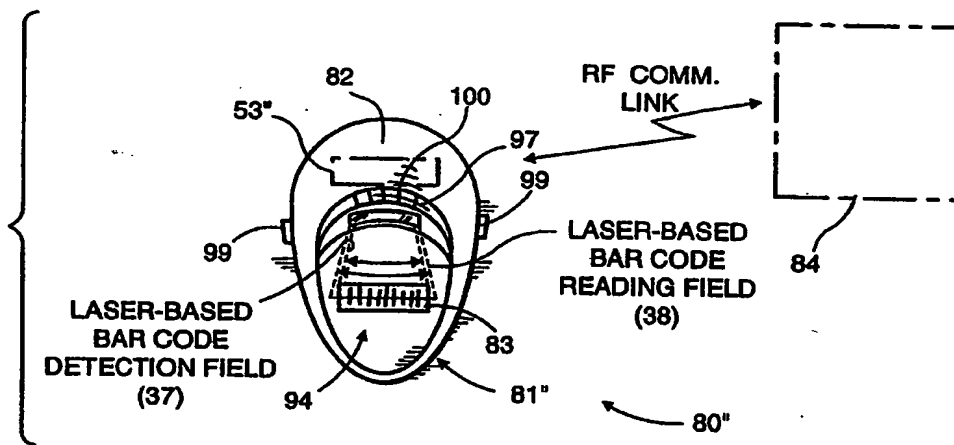


FIG. 4F

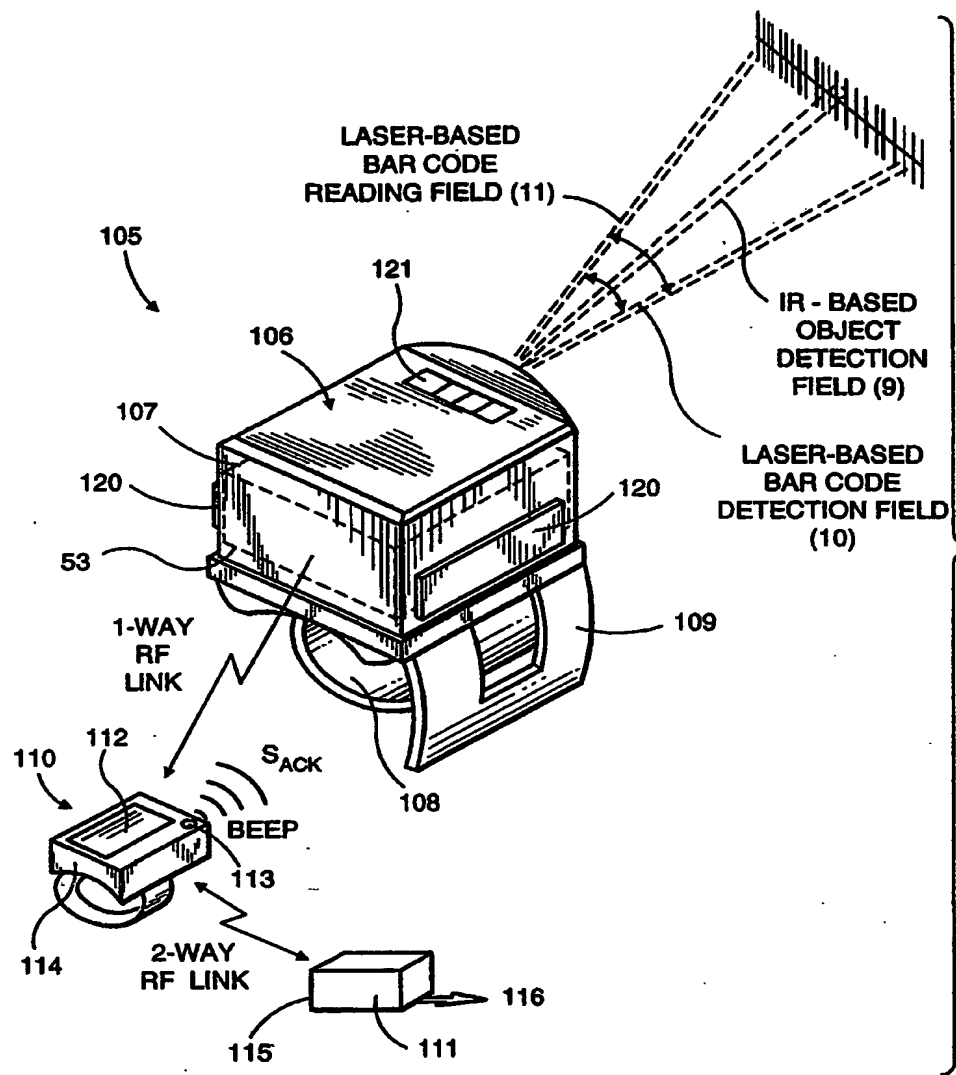


FIG. 5A



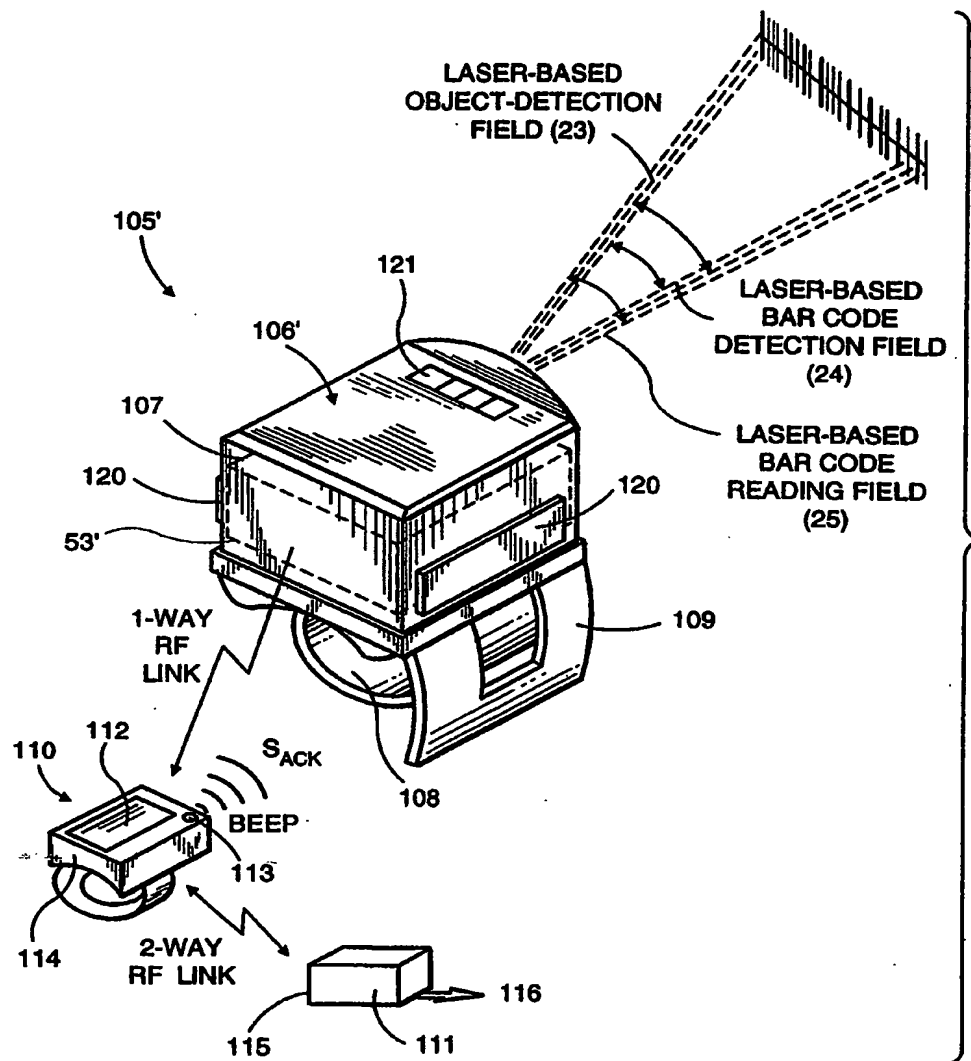


FIG. 5B

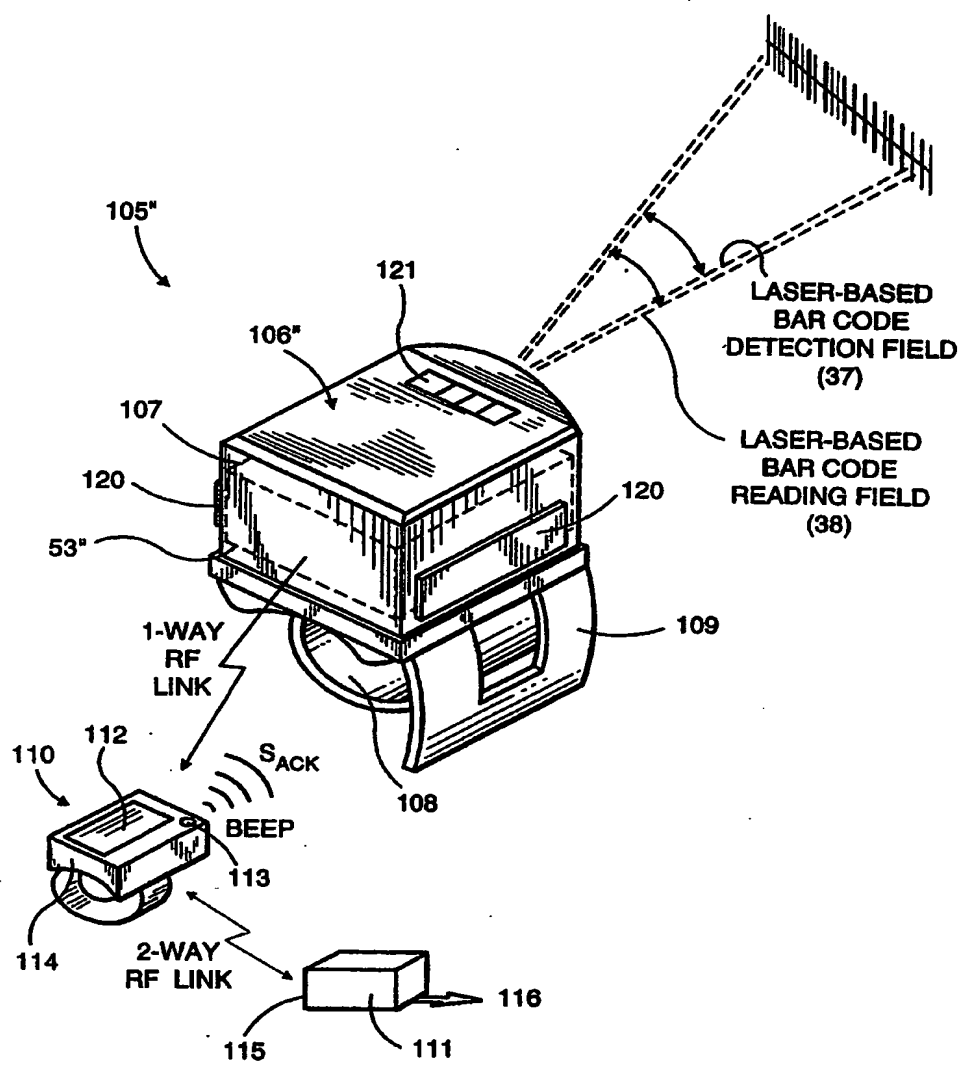


FIG. 5C

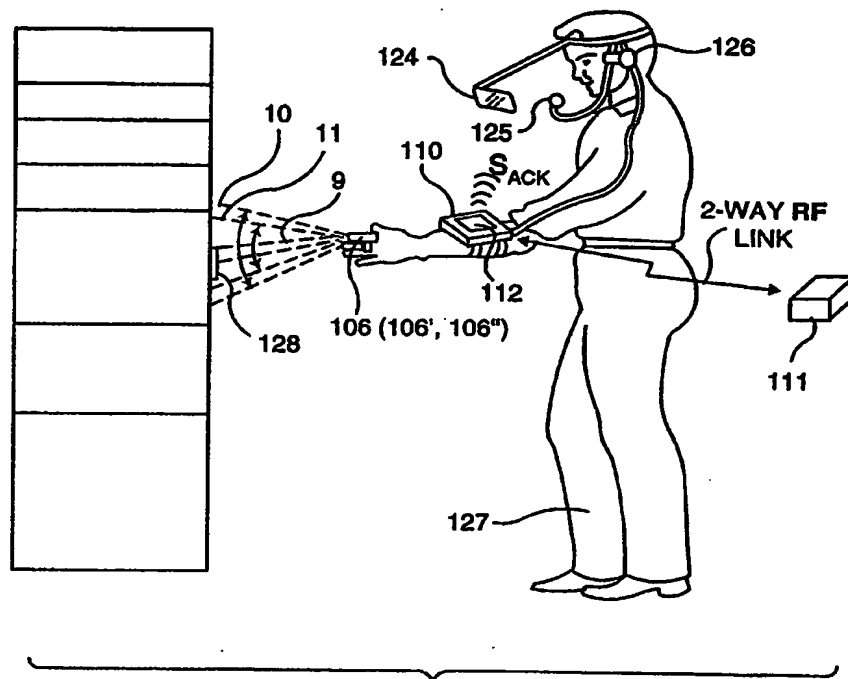


FIG. 5D

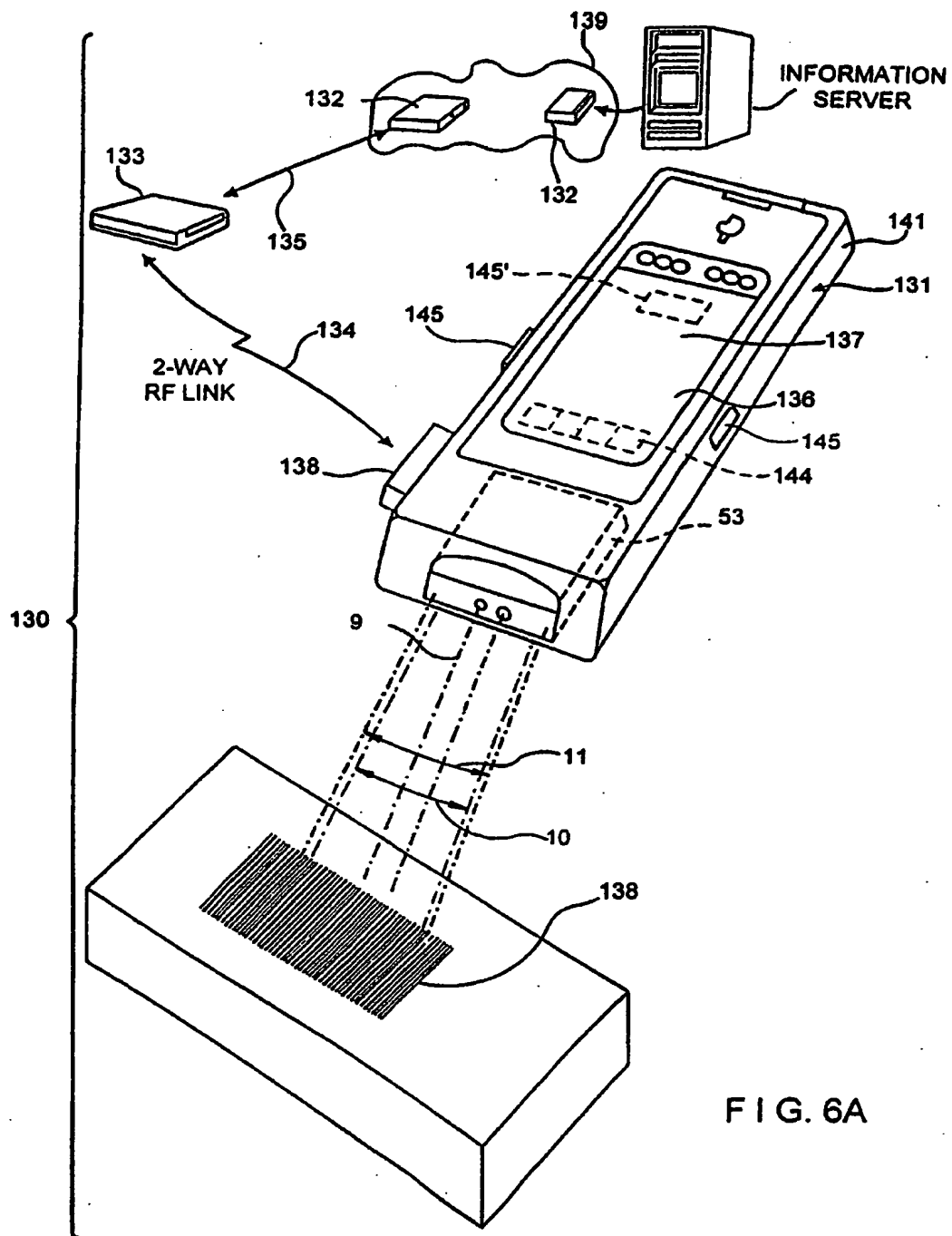


FIG. 6A

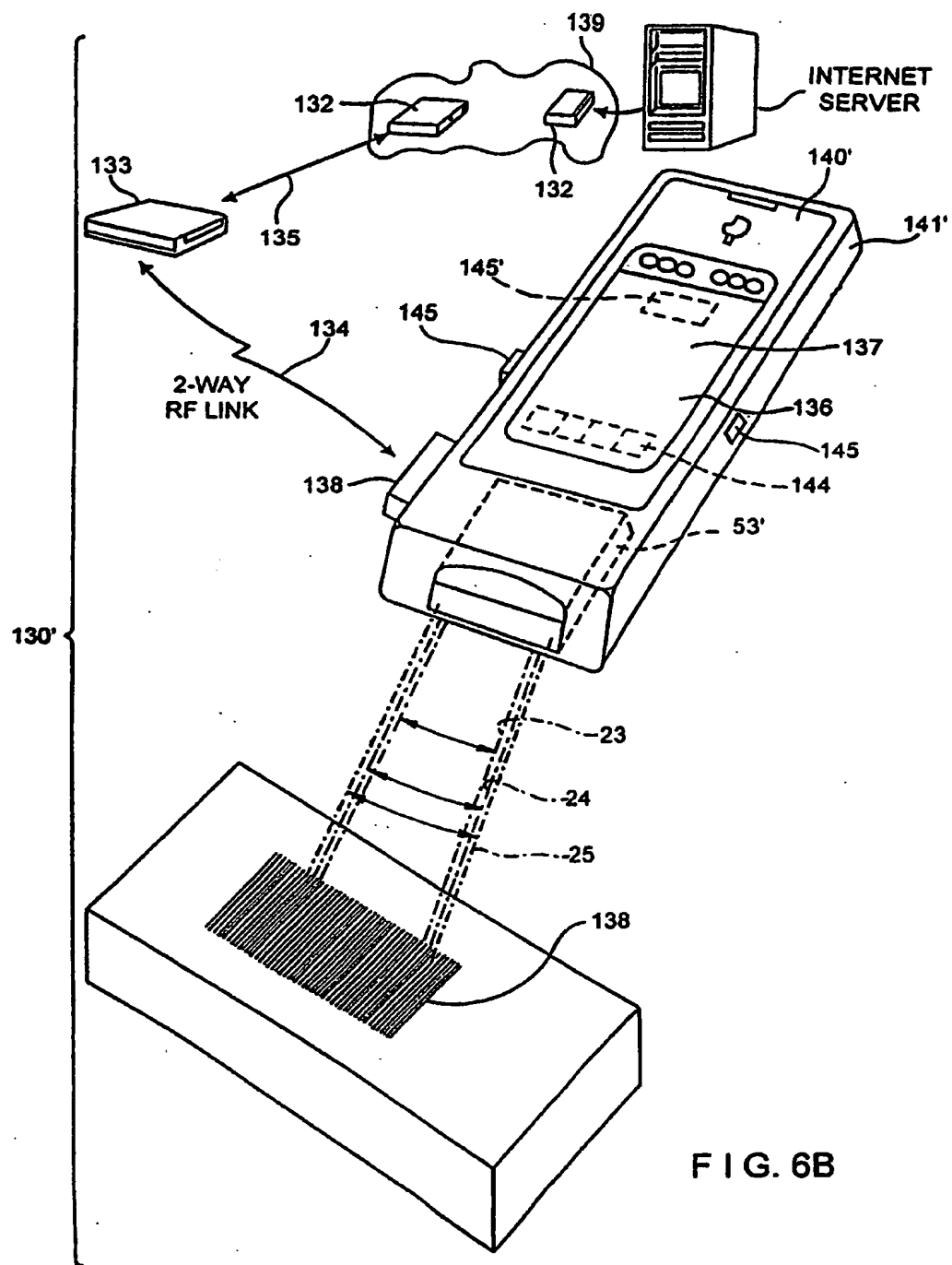
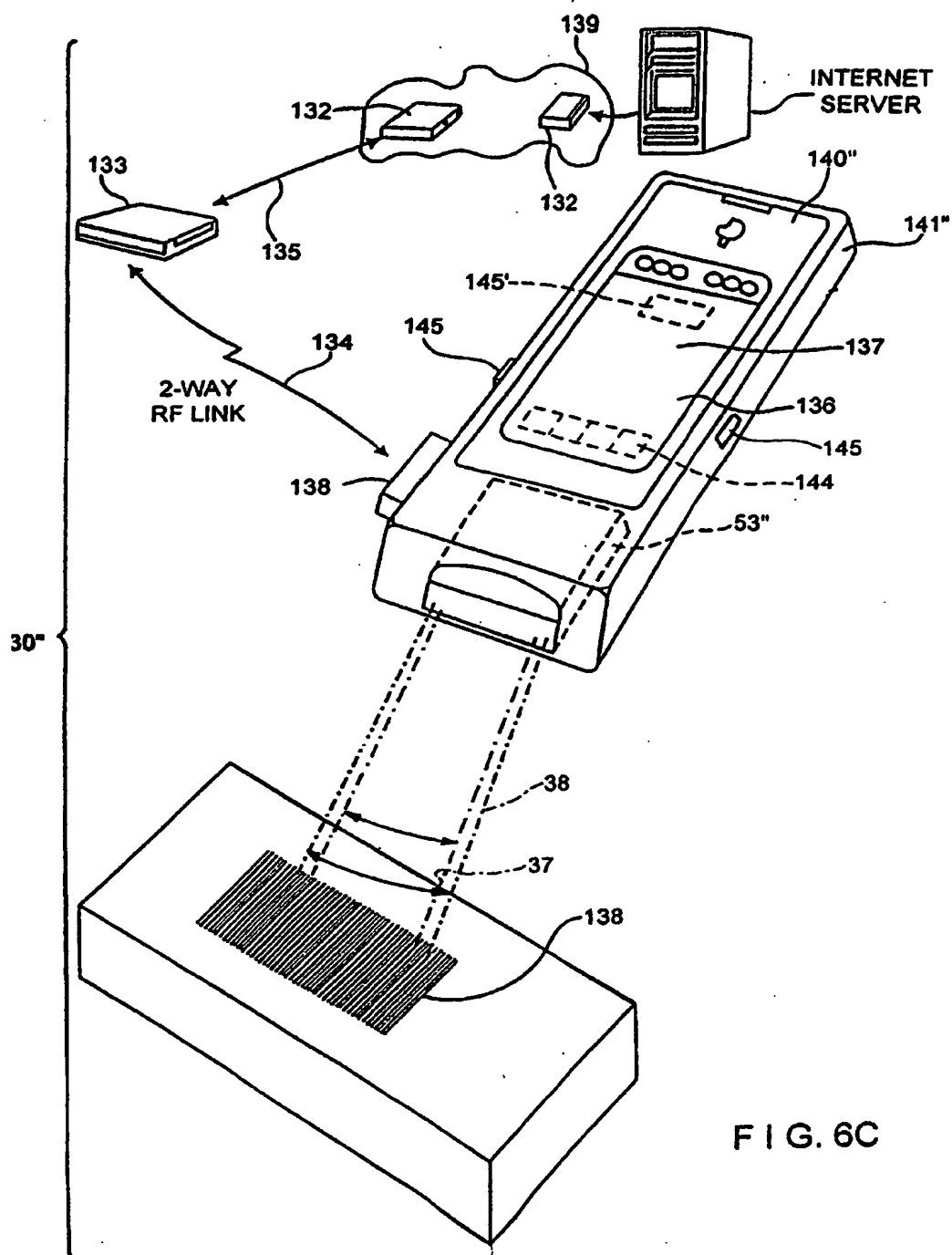


FIG. 6B



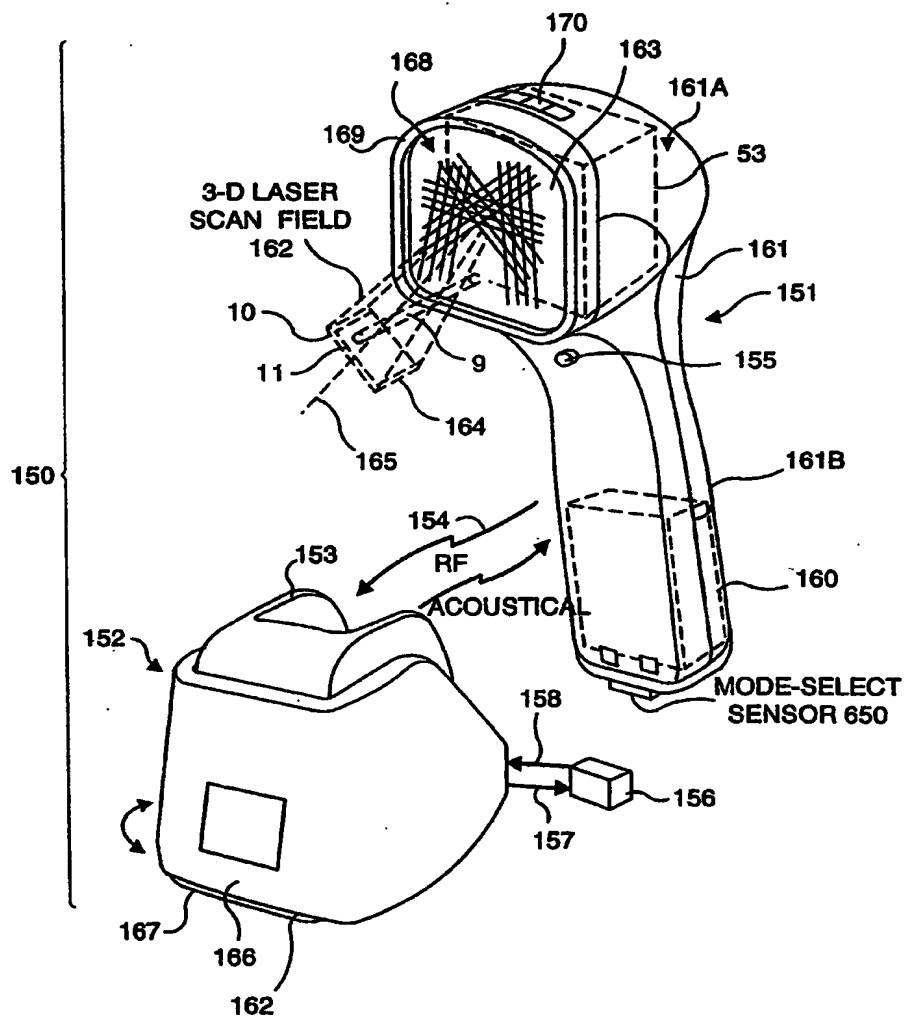


FIG. 7A

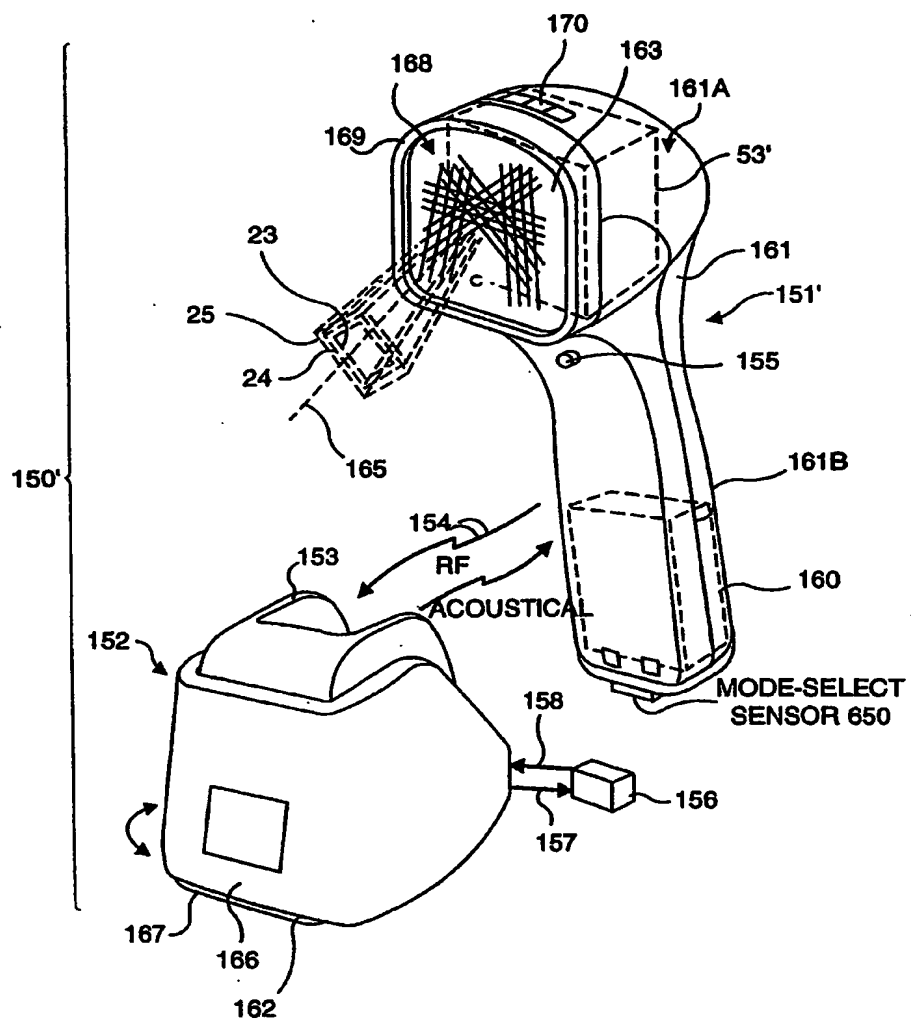


FIG. 7B



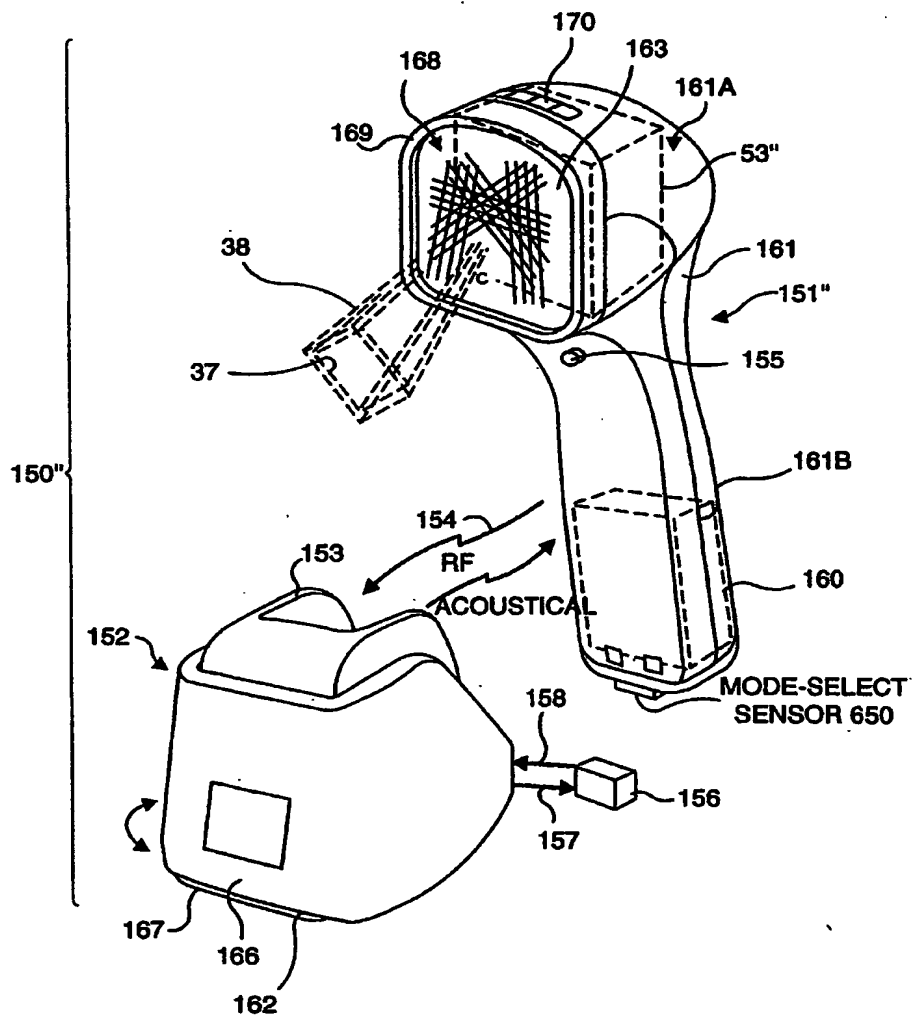


FIG. 7C

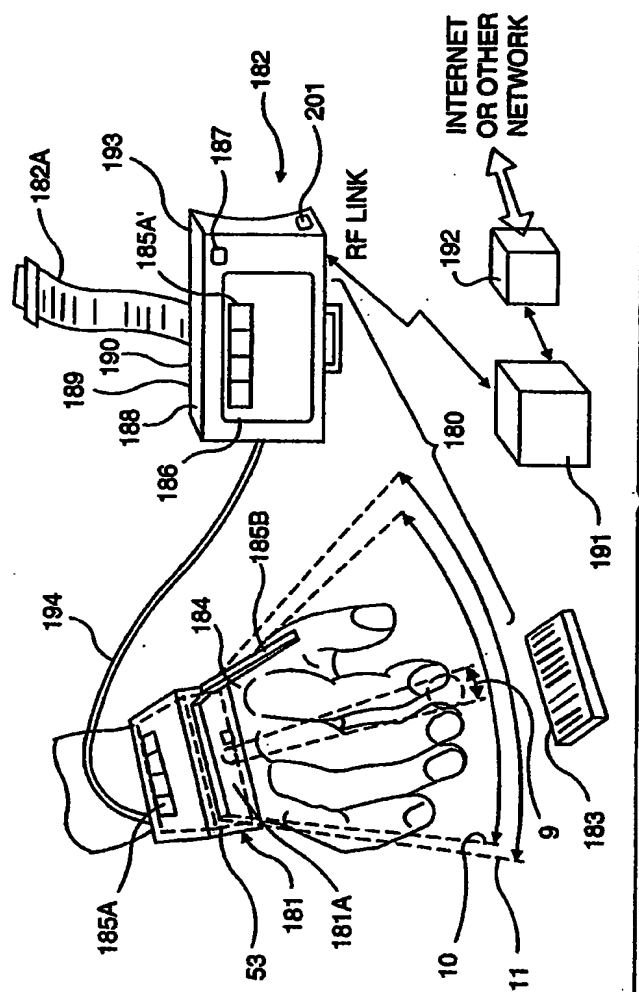
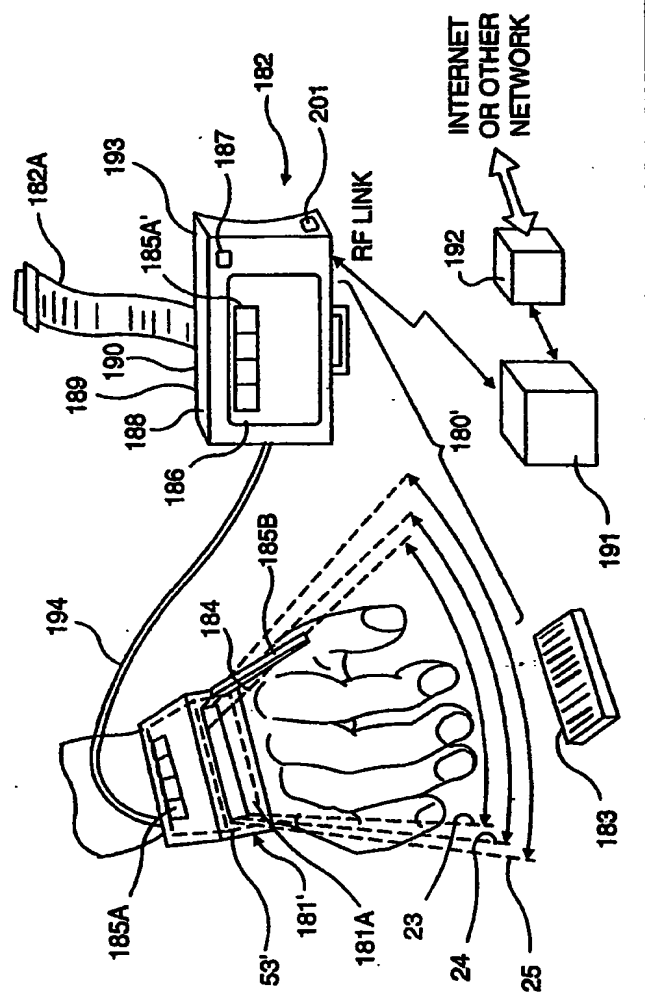


FIG. 8A



**FIG. 8B**

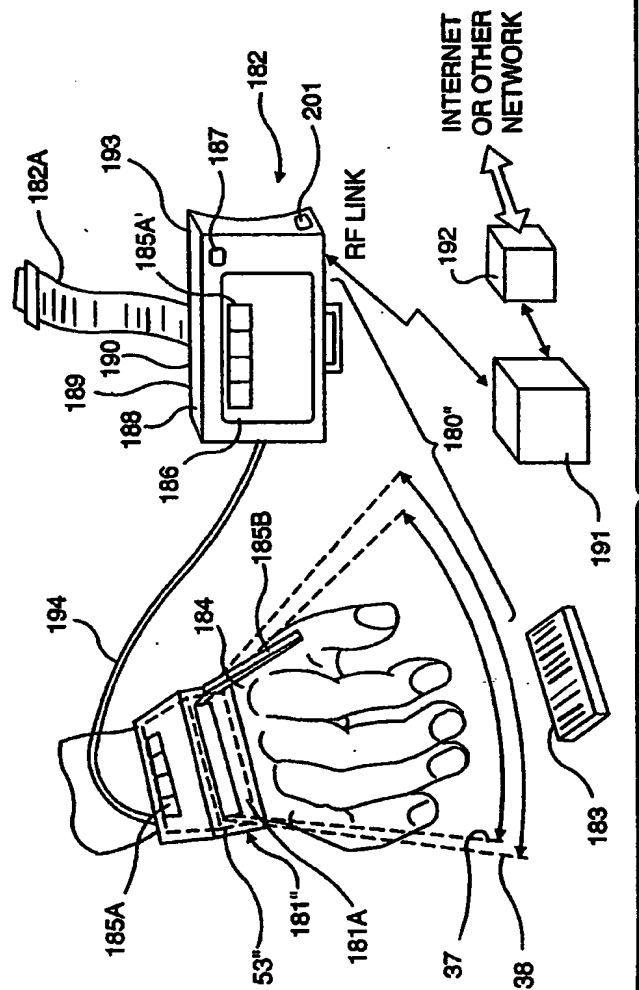


FIG. 8C

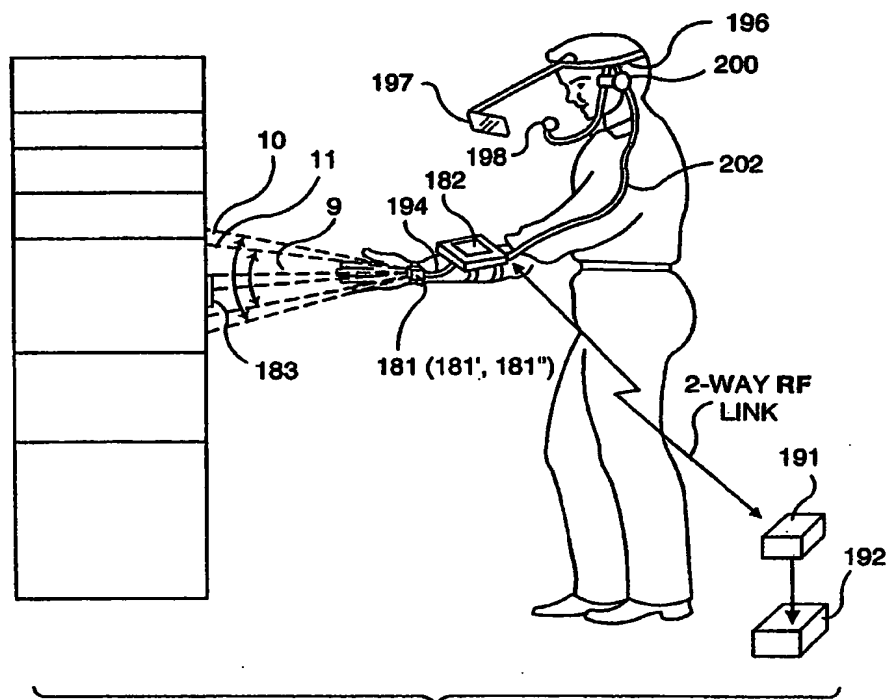
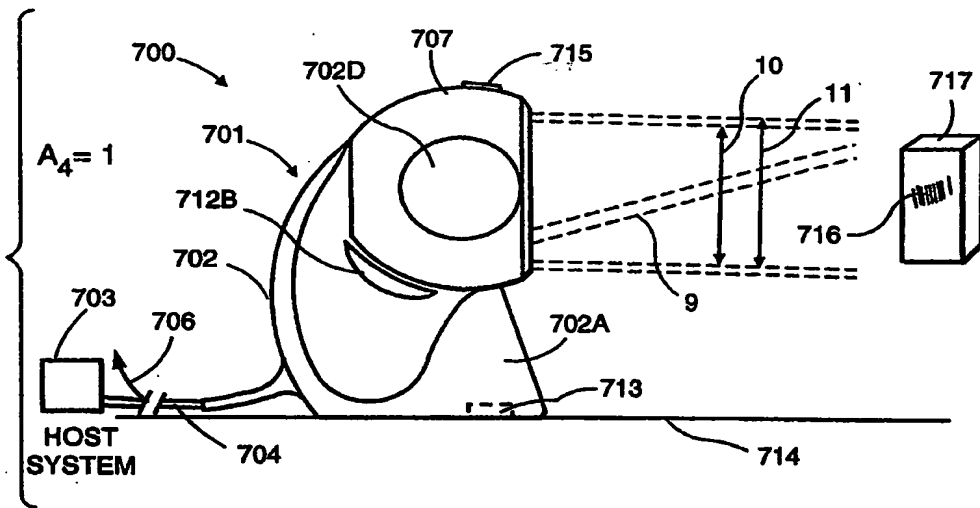
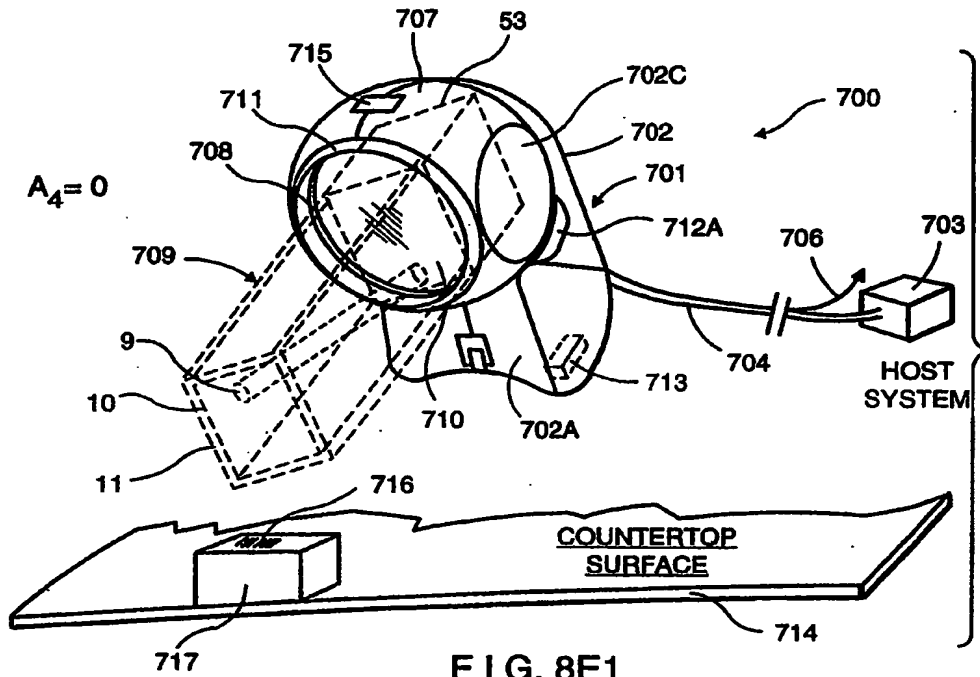


FIG. 8D



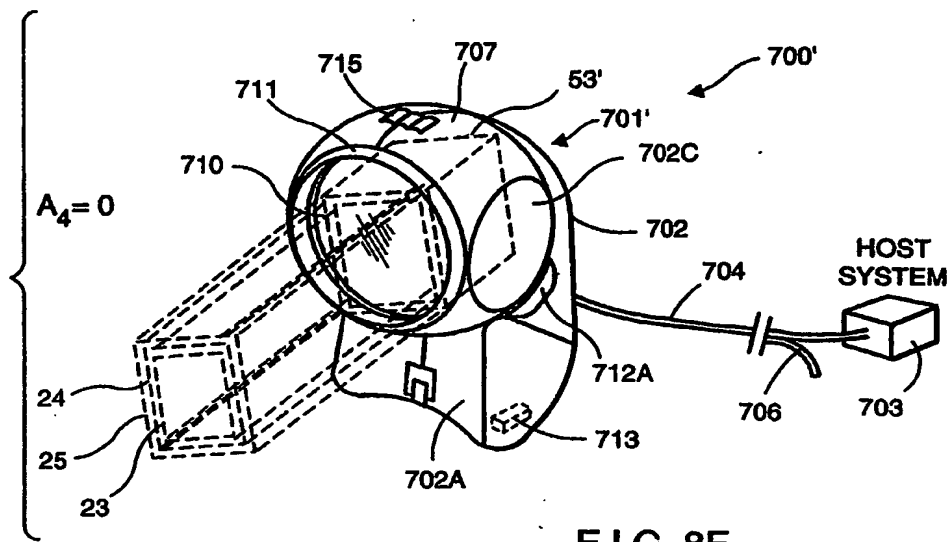


FIG. 8F

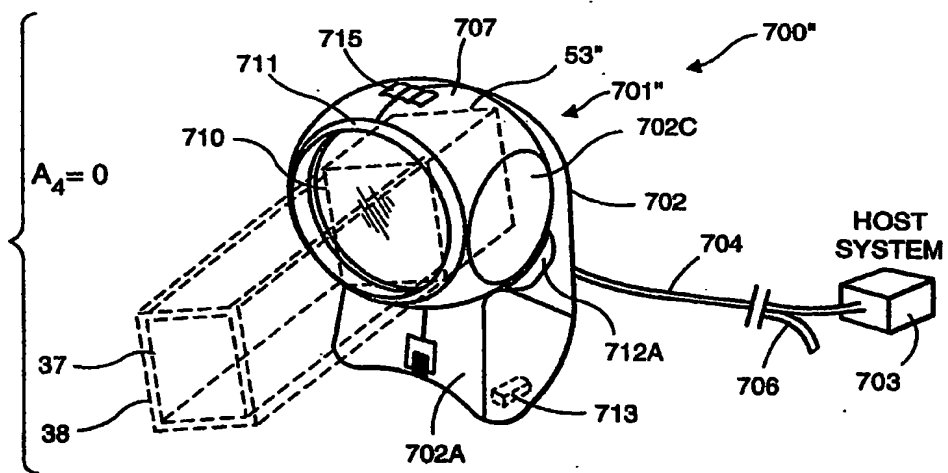


FIG. 8G

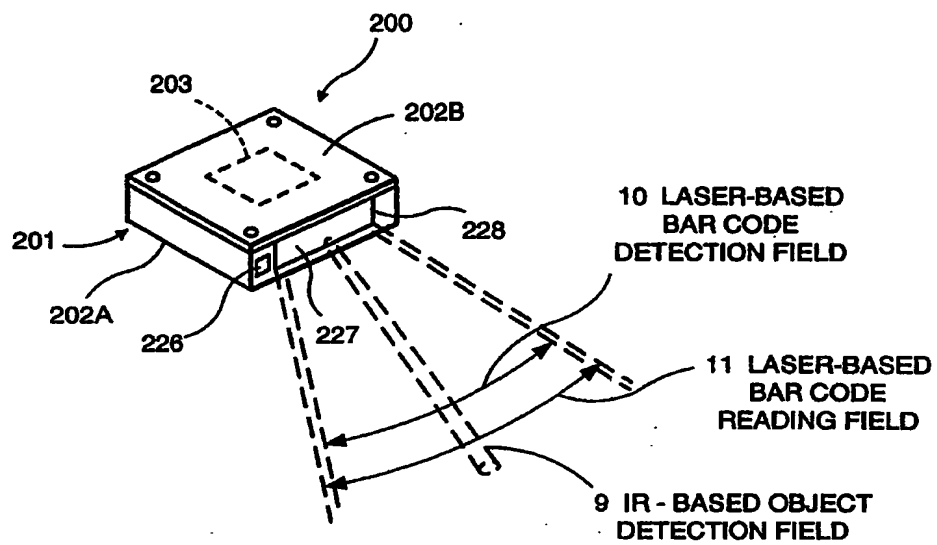


FIG. 9A



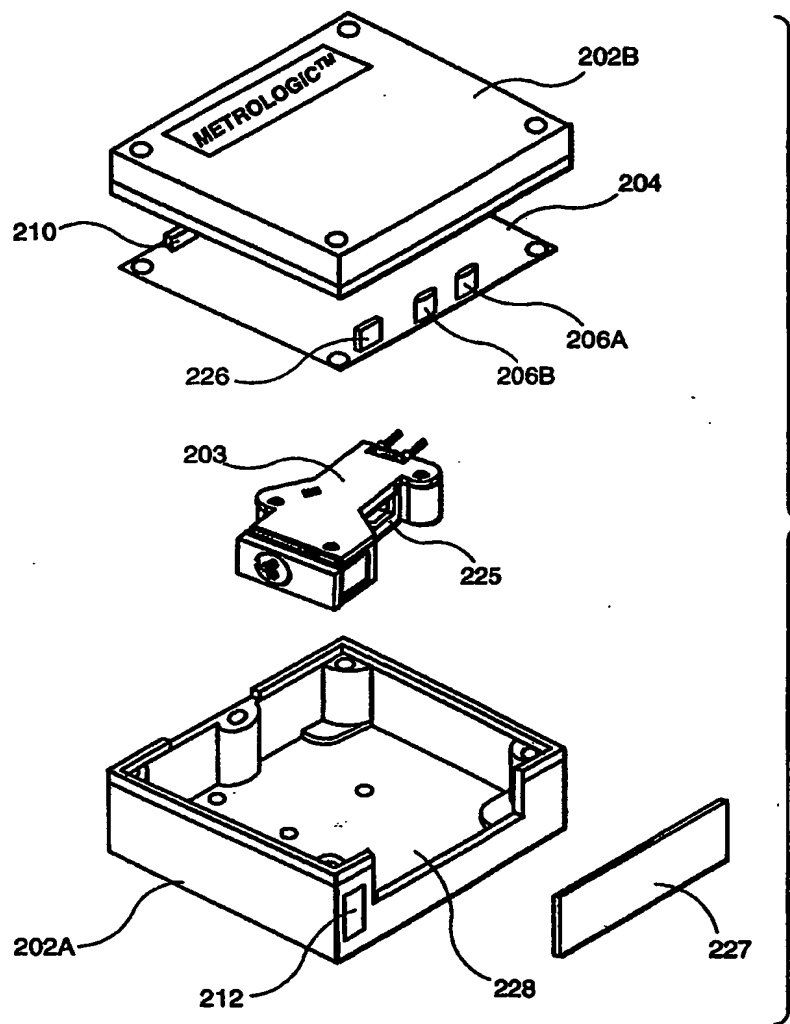


FIG. 9B

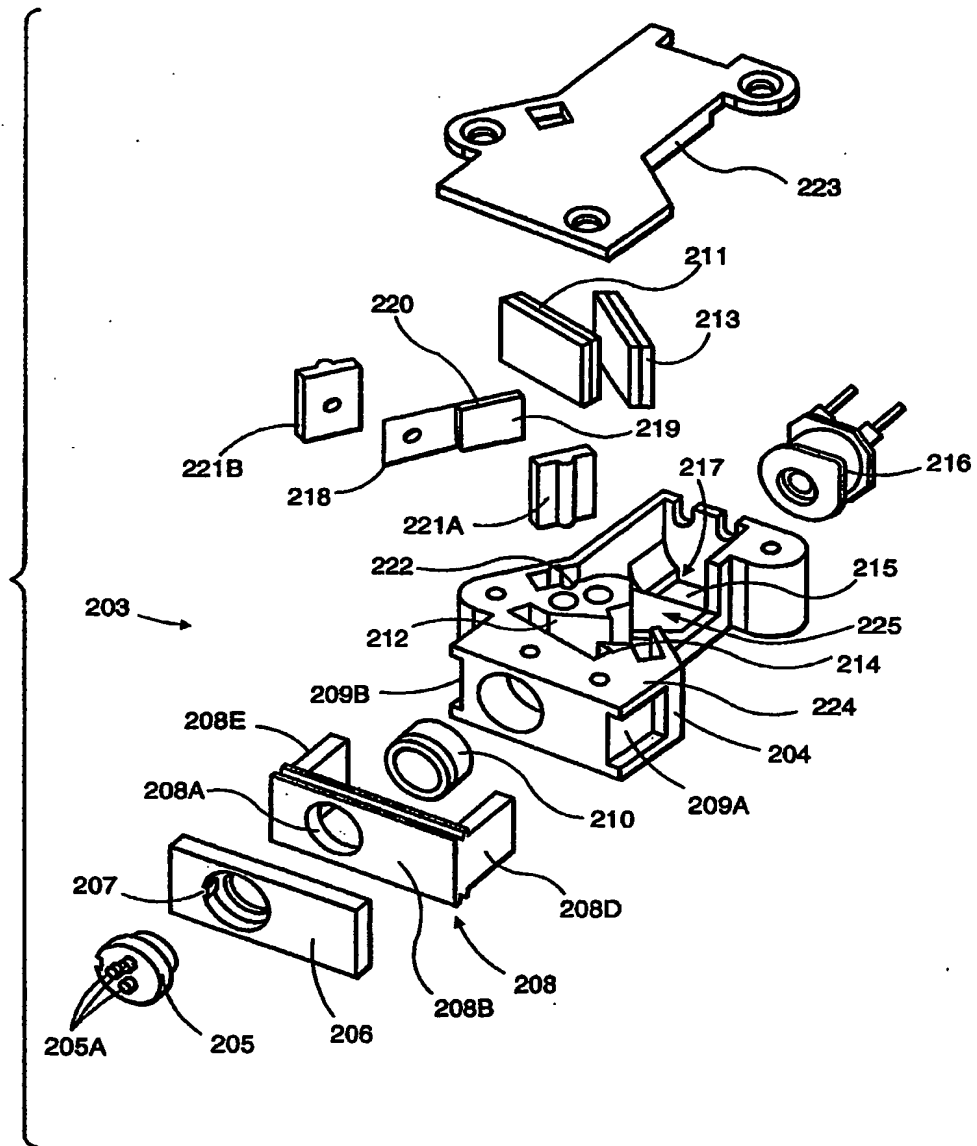


FIG. 9C

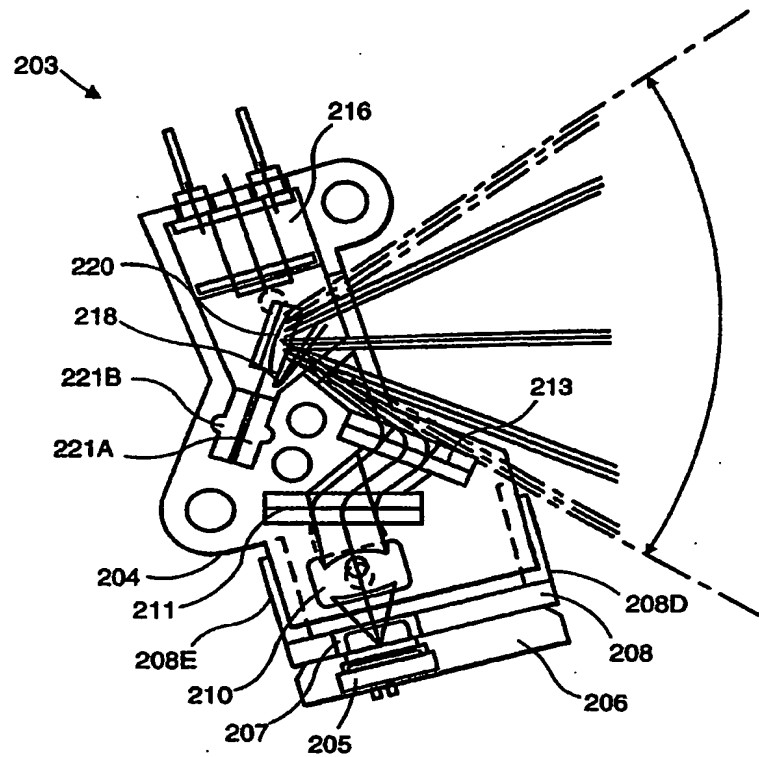


FIG. 9D

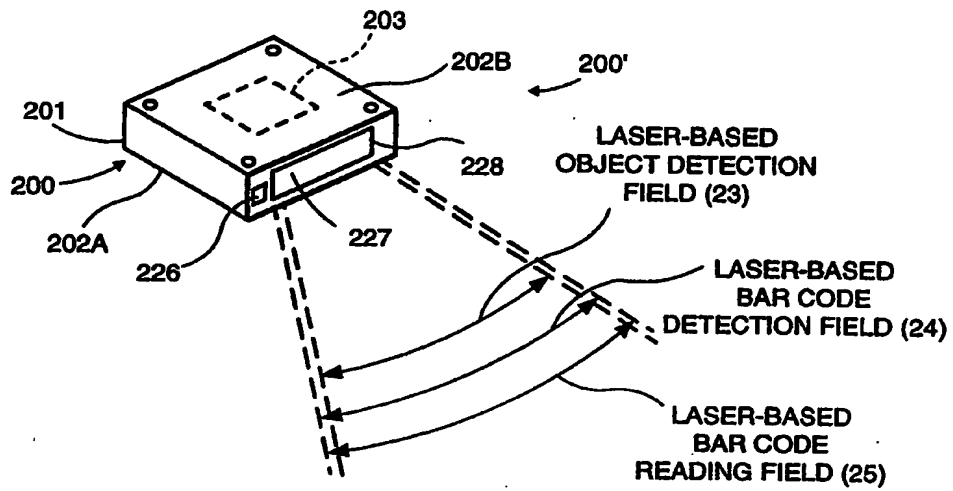


FIG. 9E

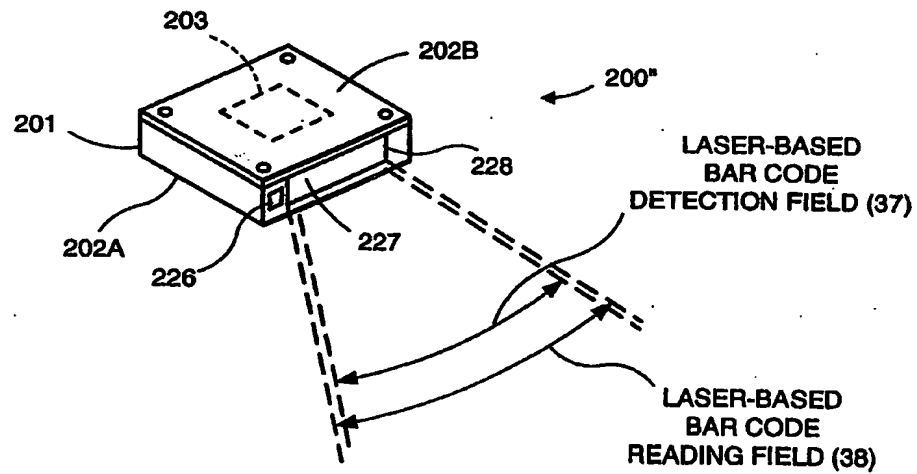


FIG. 9F

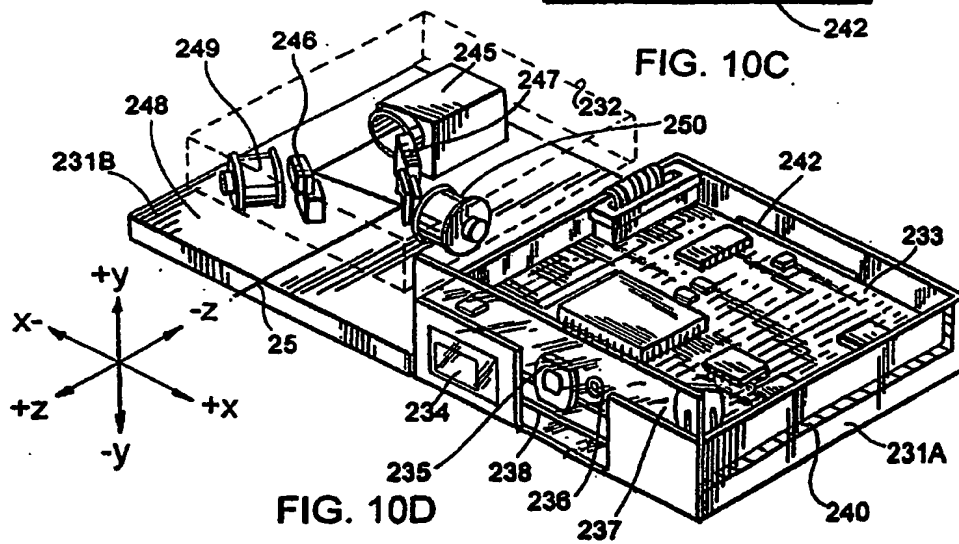
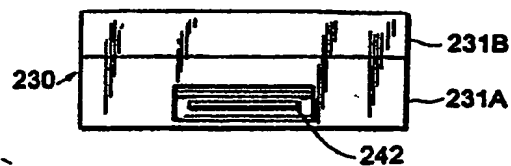
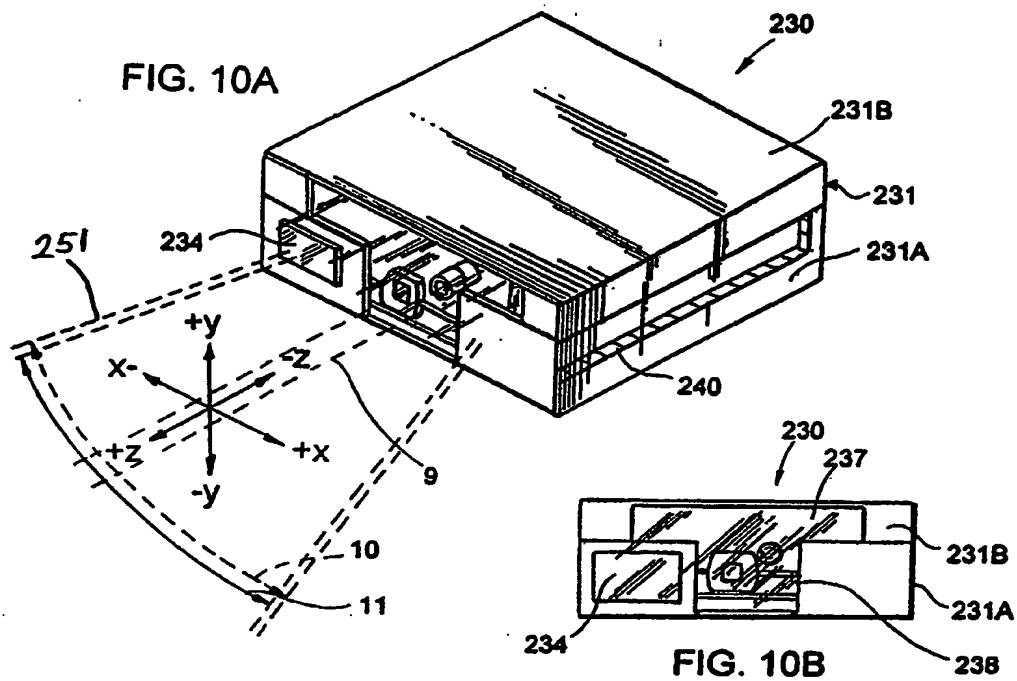


FIG. 10E

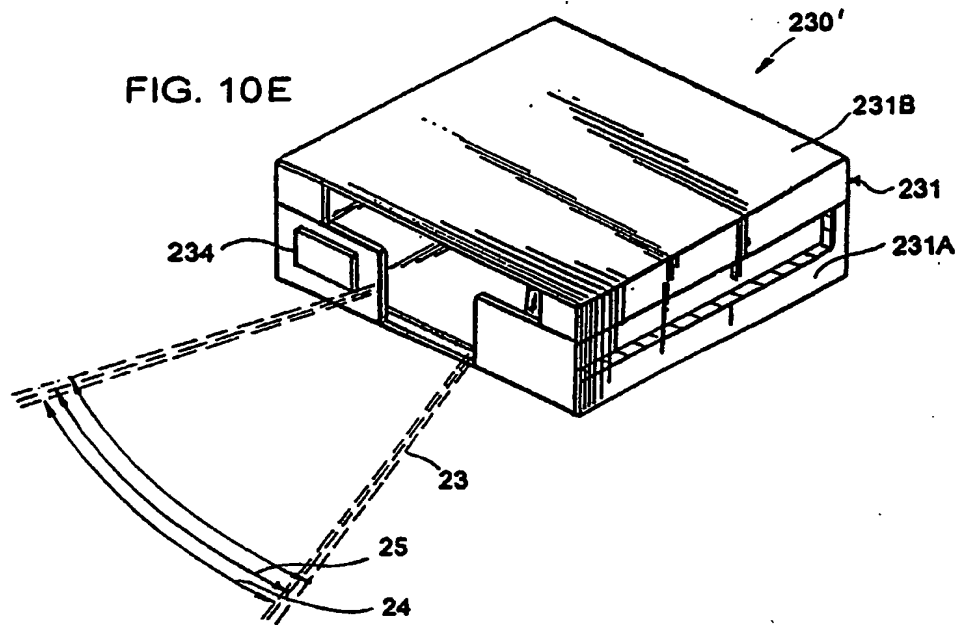
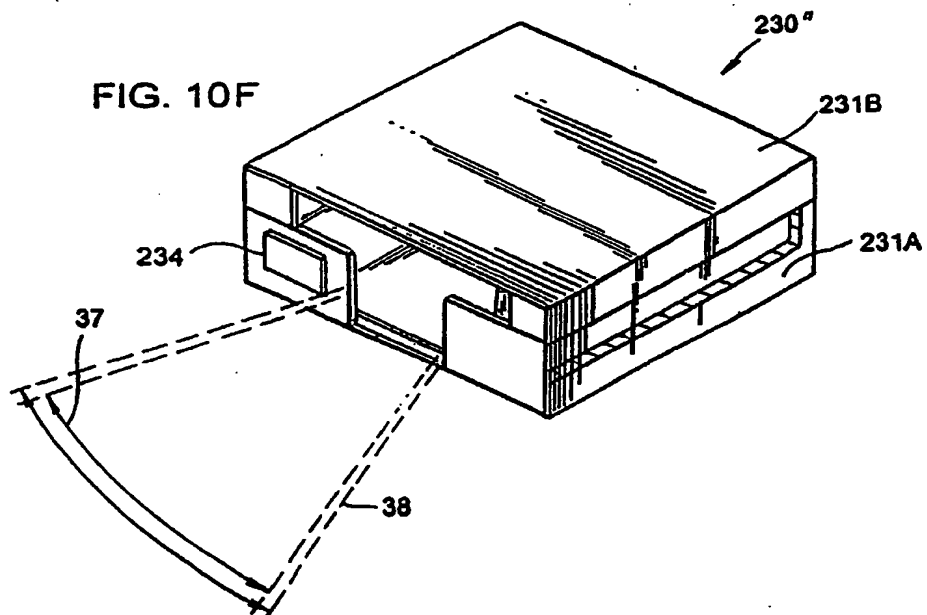
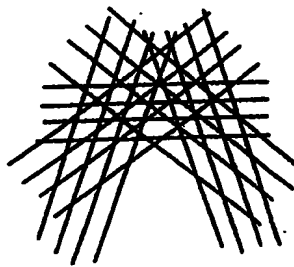


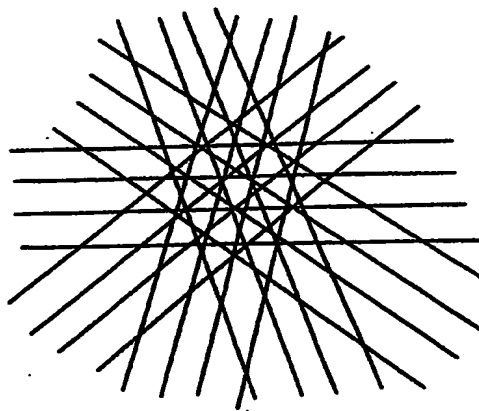
FIG. 10F





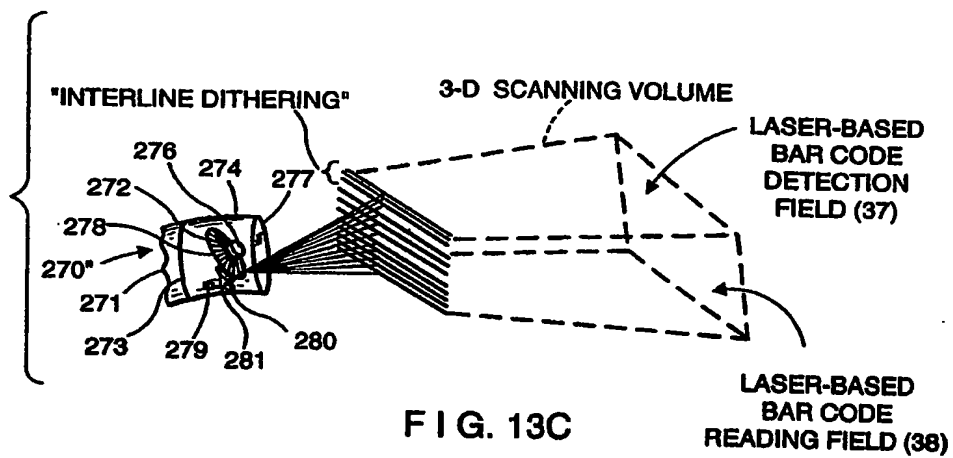
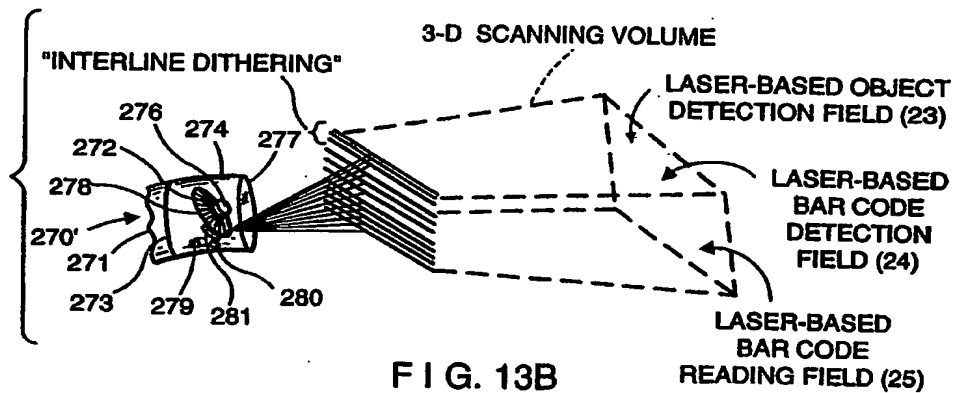
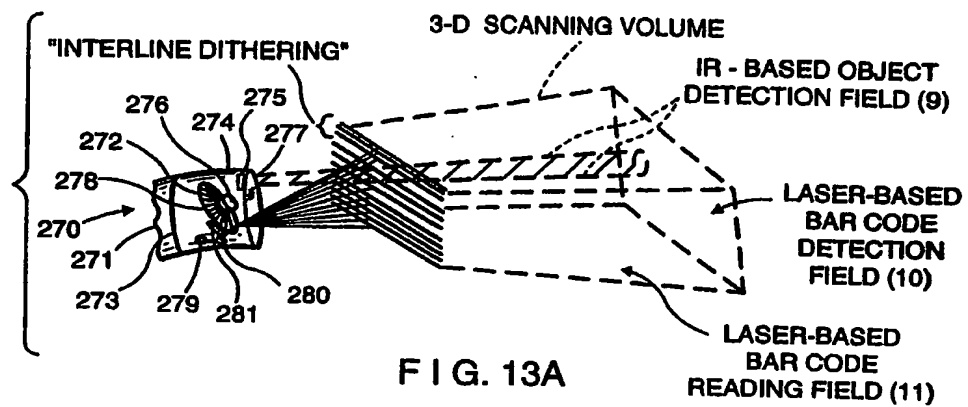


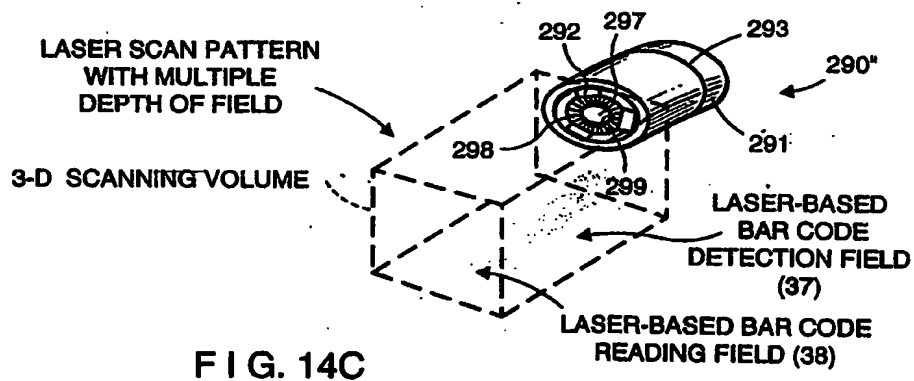
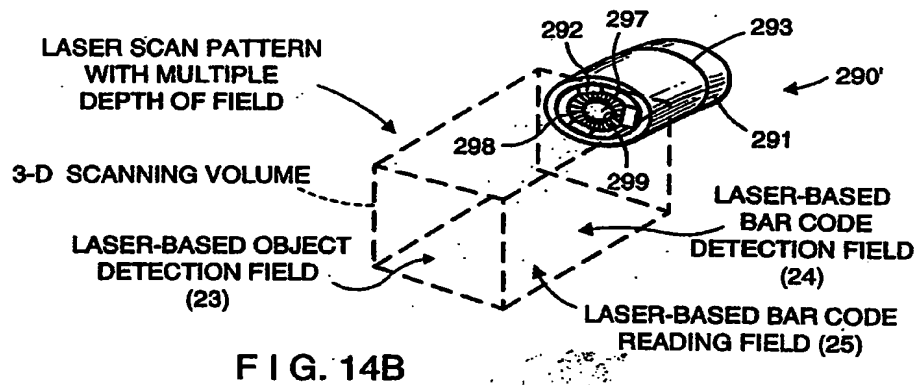
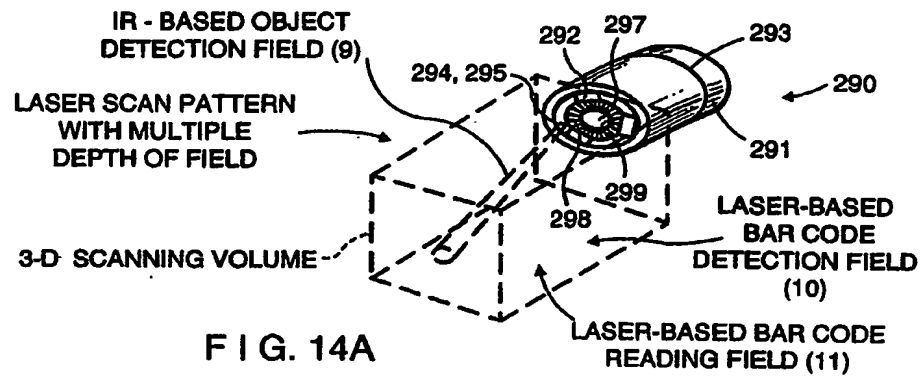
**FIG. 12A**



**FIG. 12B**







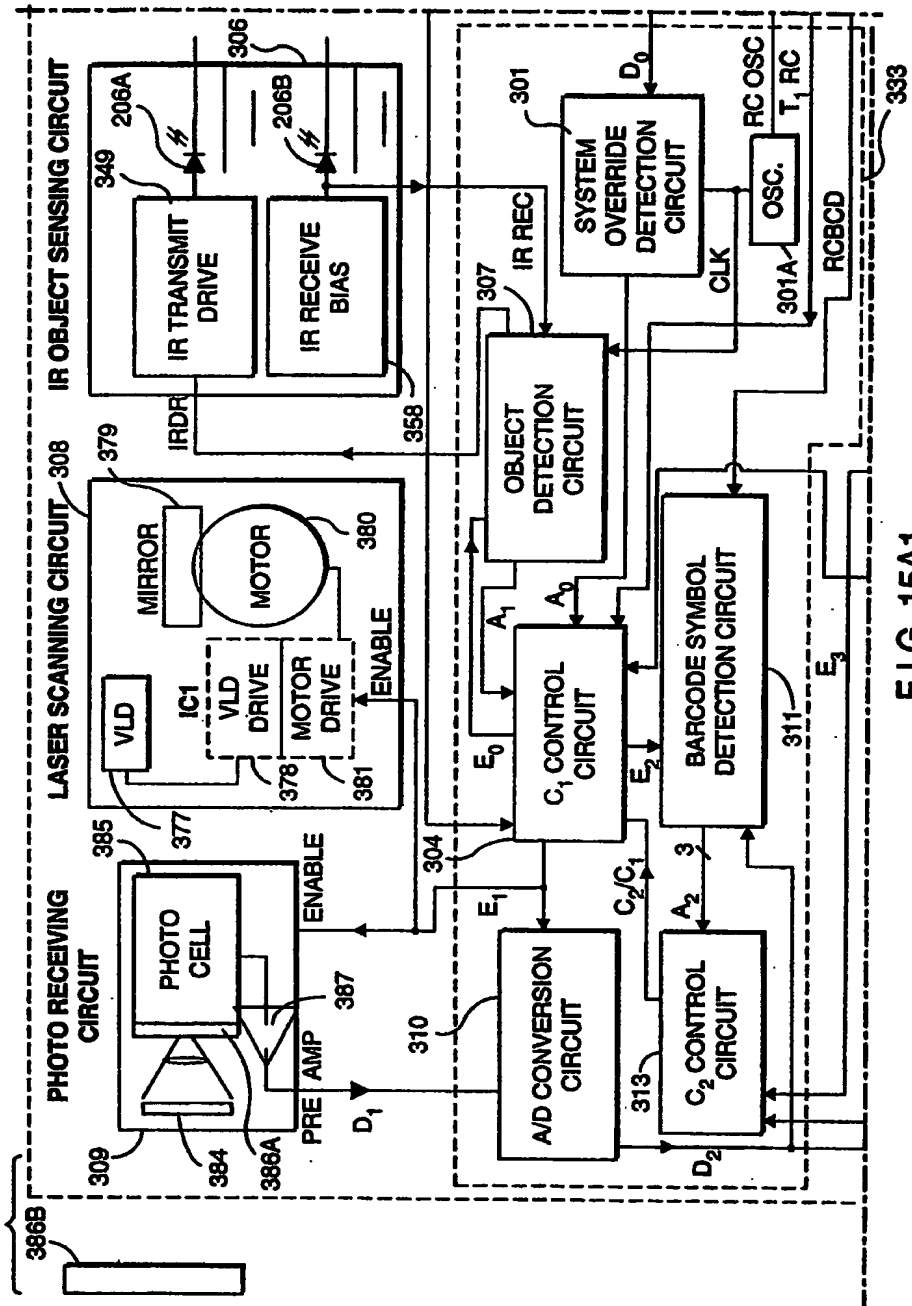


FIG. 15A1

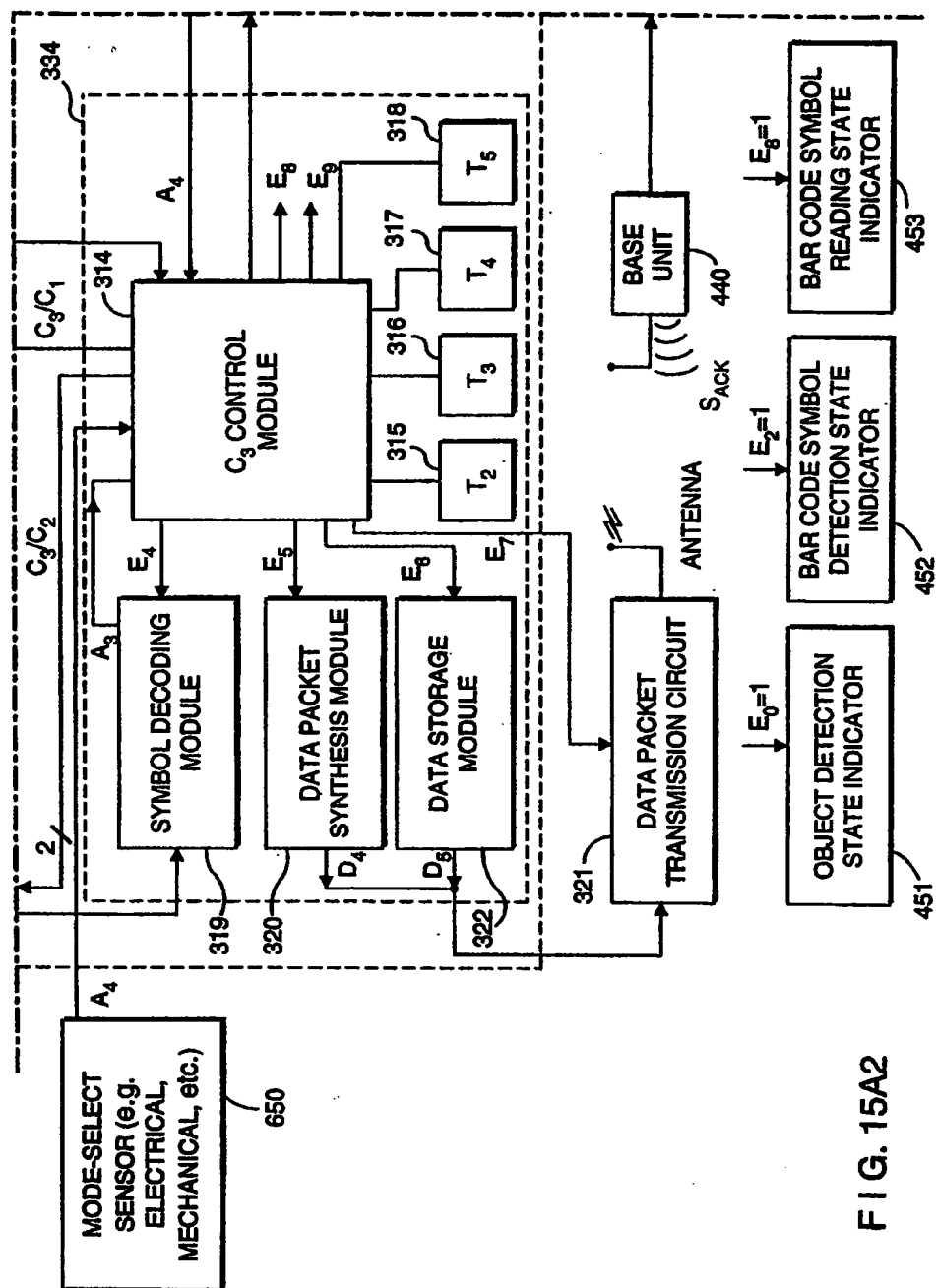


FIG. 15A2

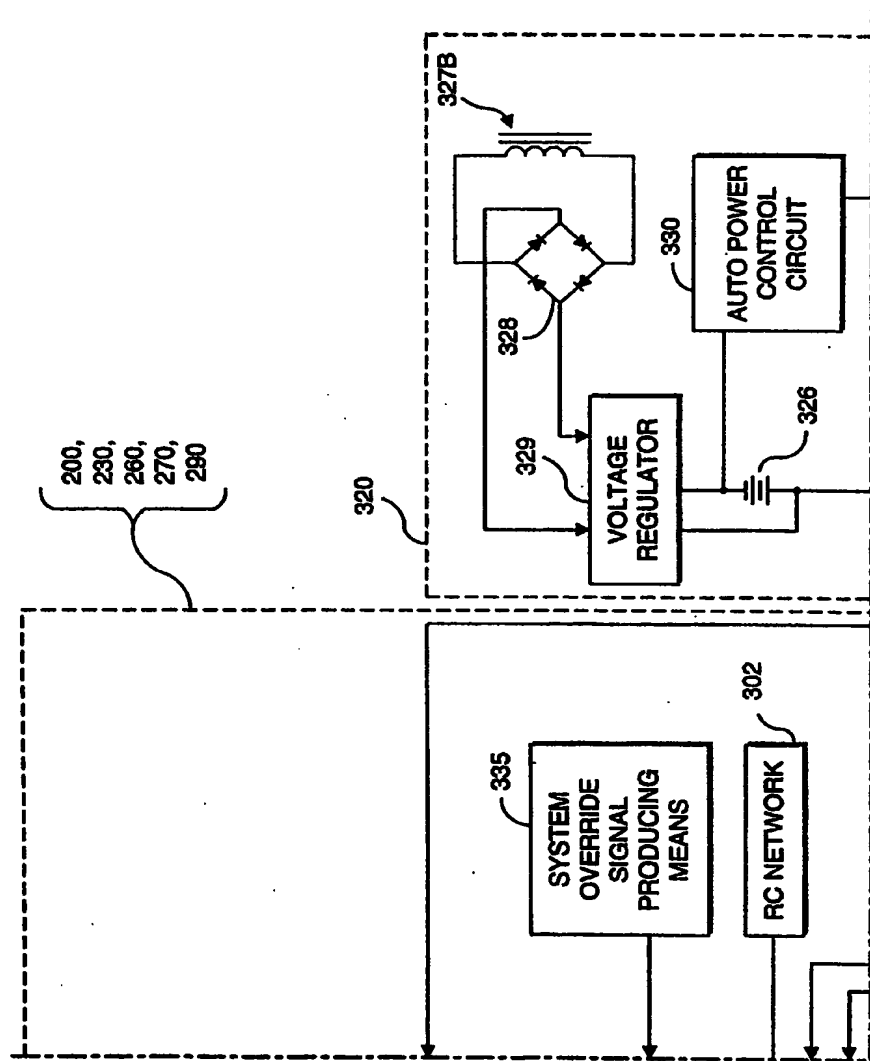


FIG. 15A3

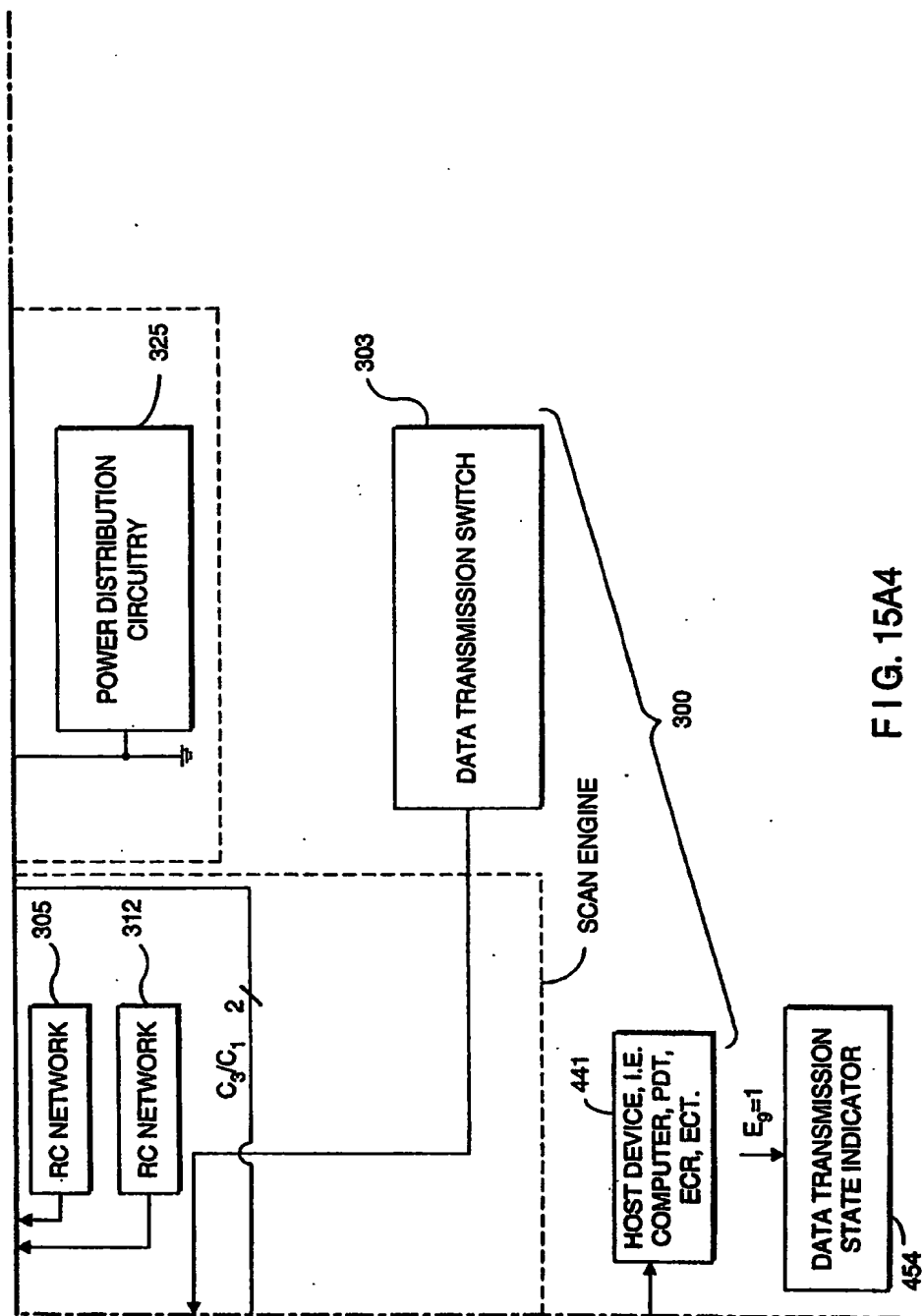


FIG. 15A4

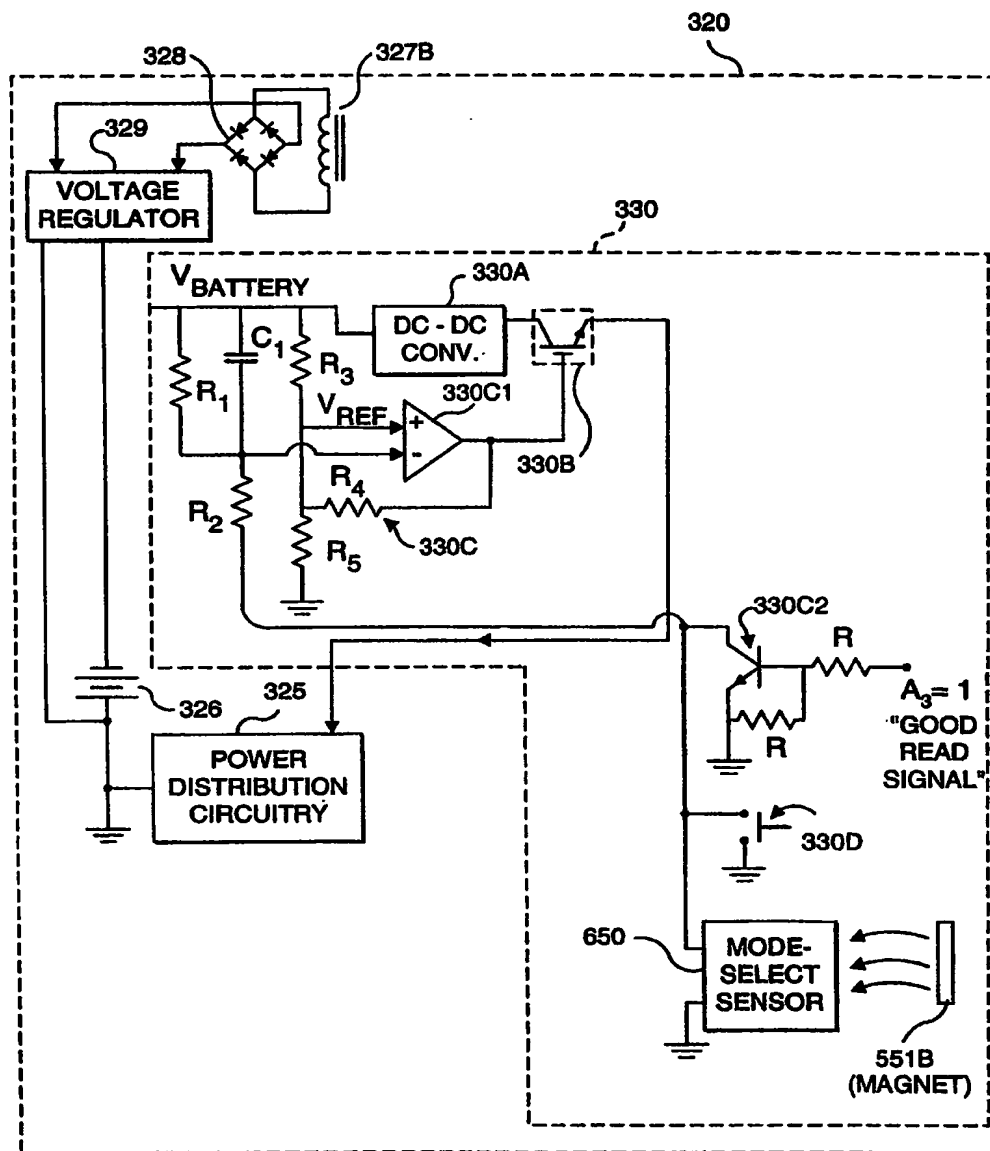
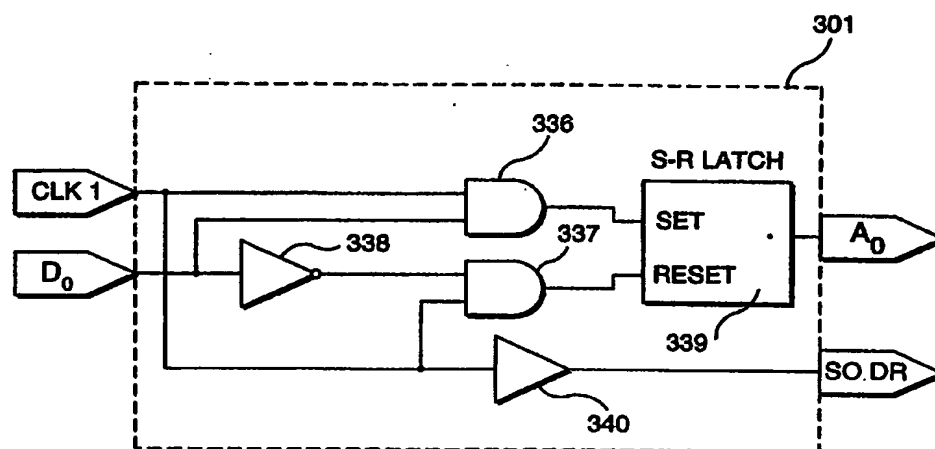


FIG. 15B1



**FIG. 15B2**

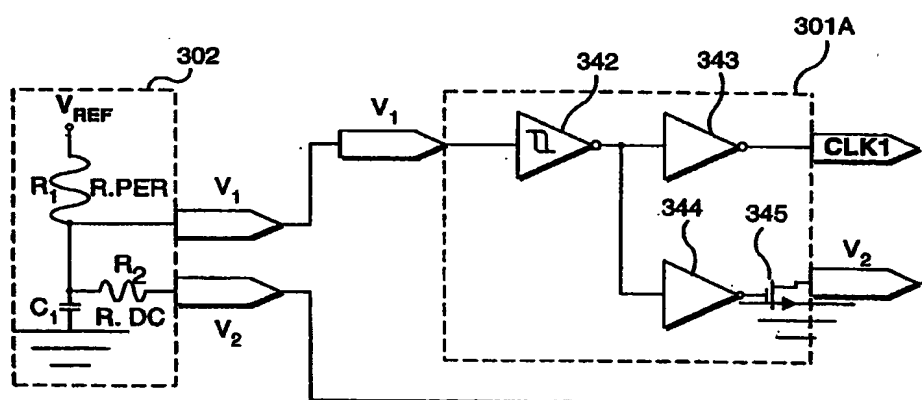


FIG. 15C



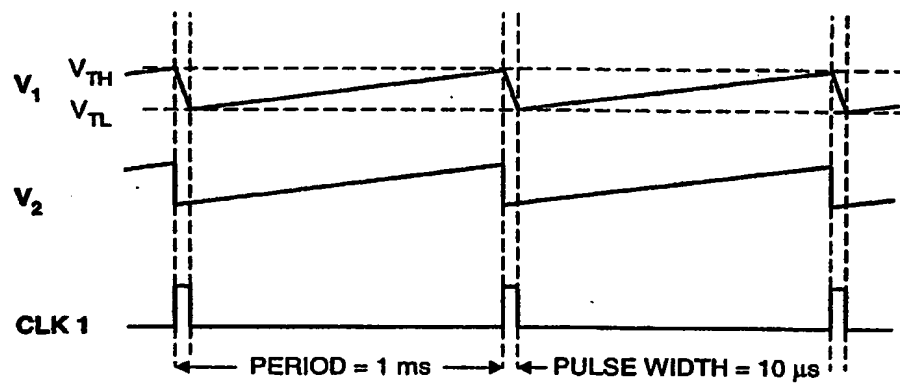


FIG. 15D

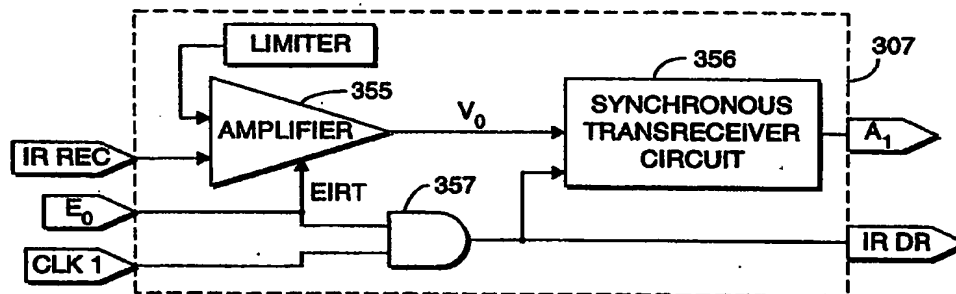


FIG. 15E



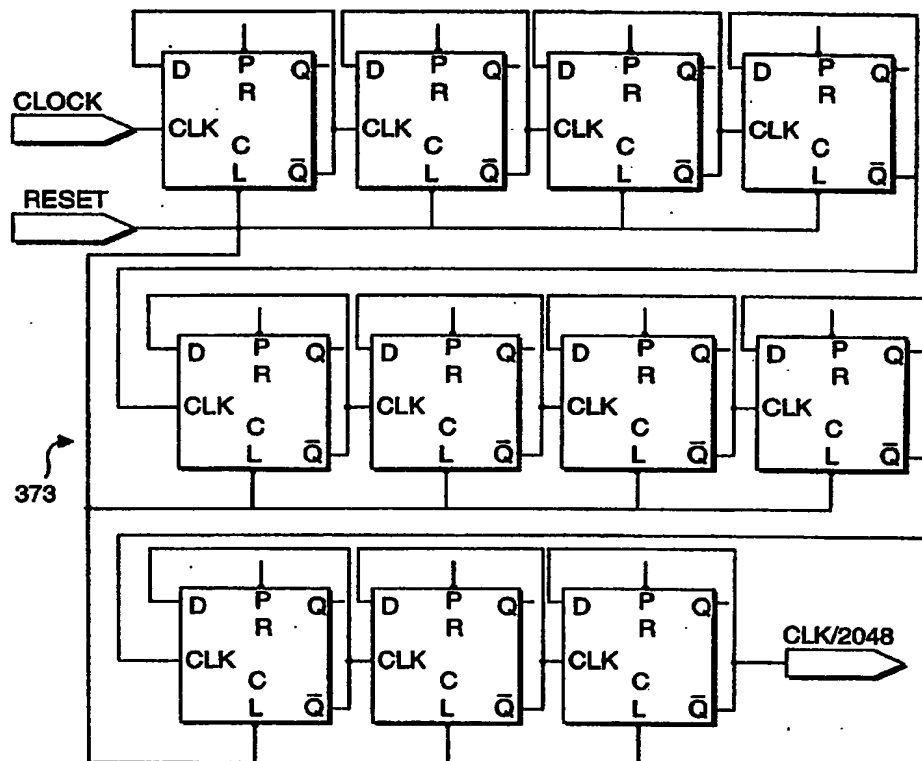


FIG. 15G

$$\left. \begin{aligned} E_0 &= (B_1 + A_0) (C_3 / C_{1-1}) \\ E_1 &= (C_3 / C_{1-2}) + B_1 \\ E_2 &= (C_2 / C_1) (T_1) \end{aligned} \right\}$$

FIG. 15H

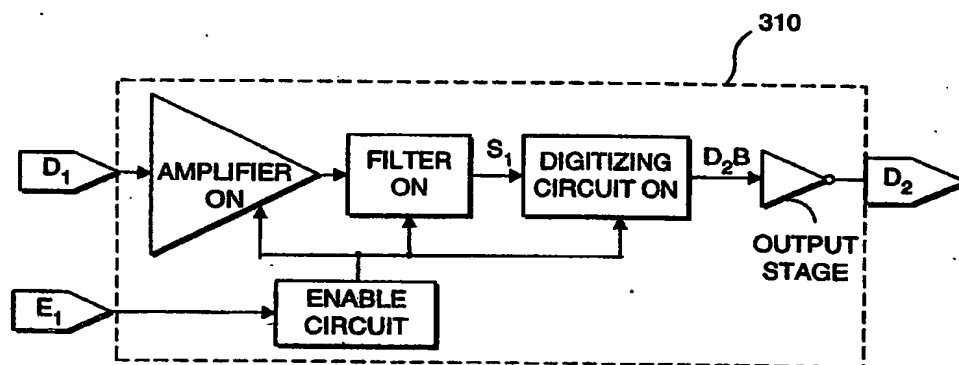
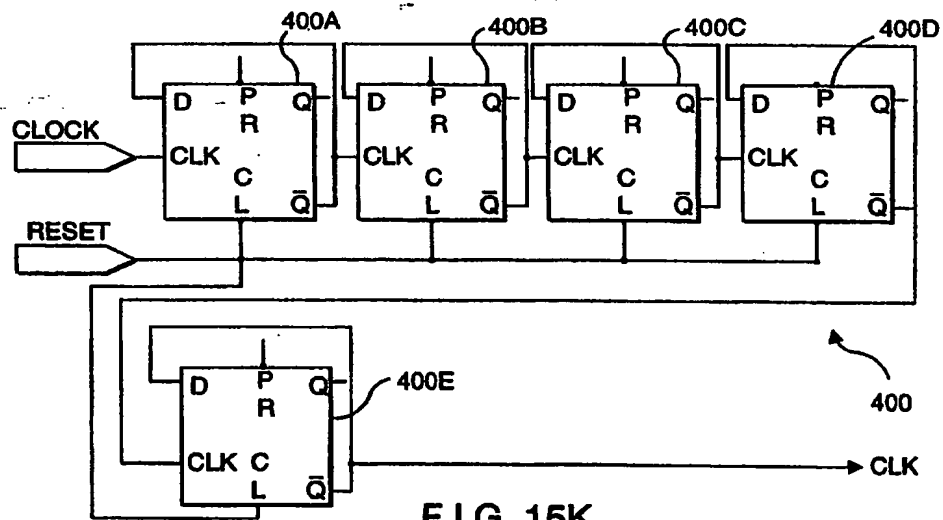
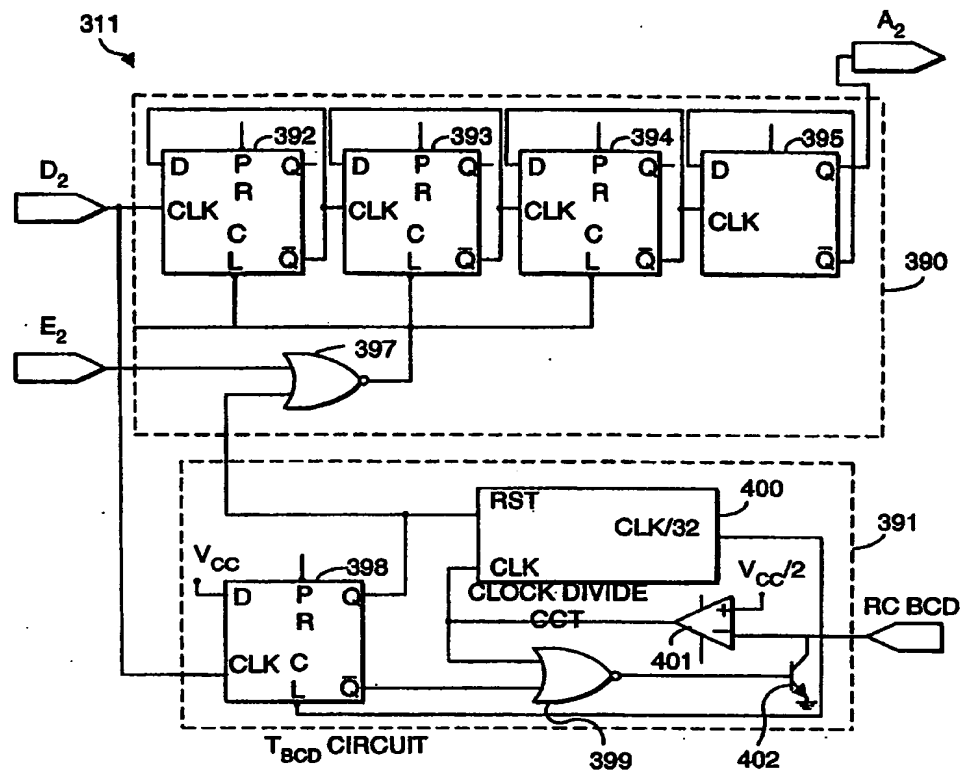


FIG. 15I



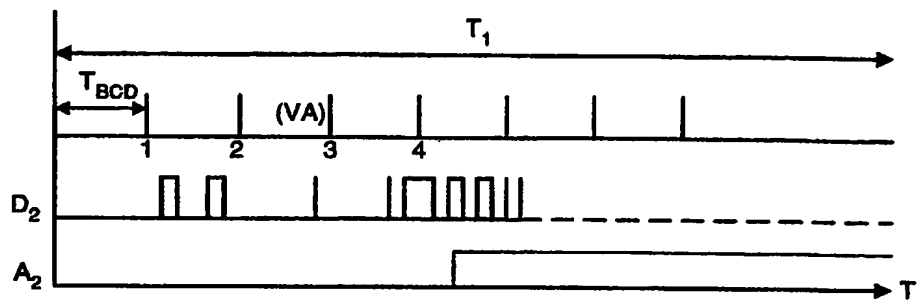


FIG. 15L

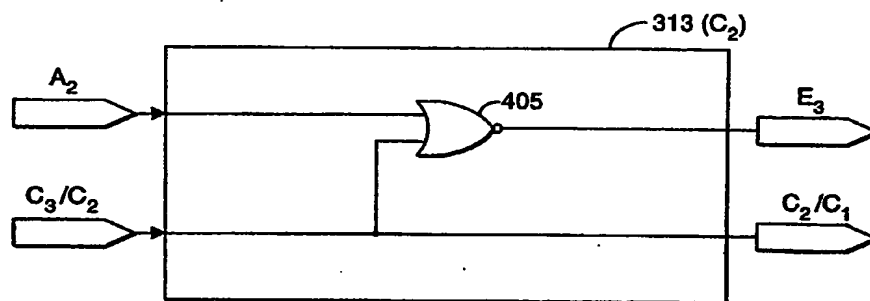


FIG. 15M

$C_3/C_2$	$A_2$	$E_3$	$C_2/C_1$
0	0	0	0
0	1	1	0
1	X	1	1

X: DON'T CARE (I.E.  $C_3/C_2$  OVERRIDES  $A_2$ )

FIG. 15N

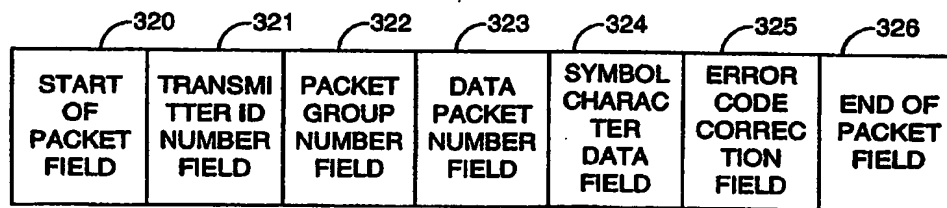


FIG. 150

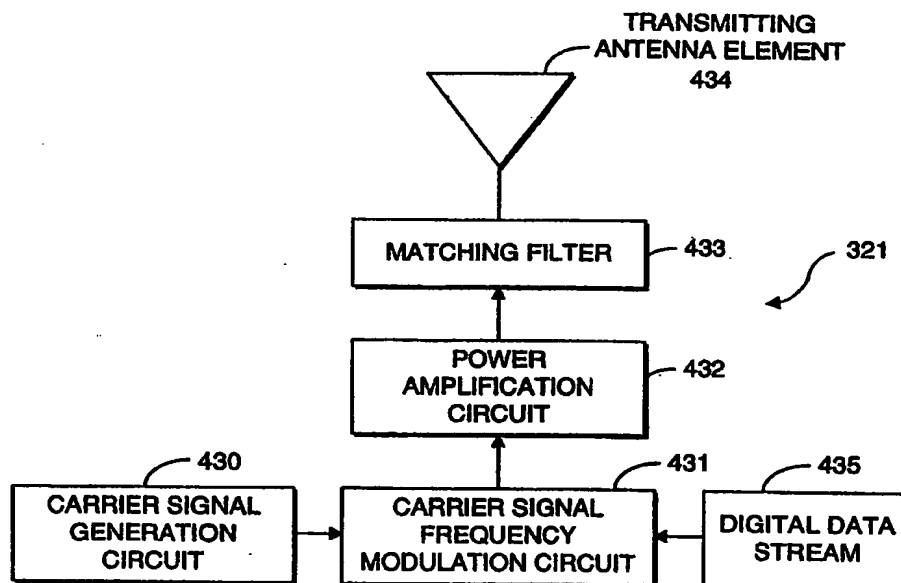


FIG. 16

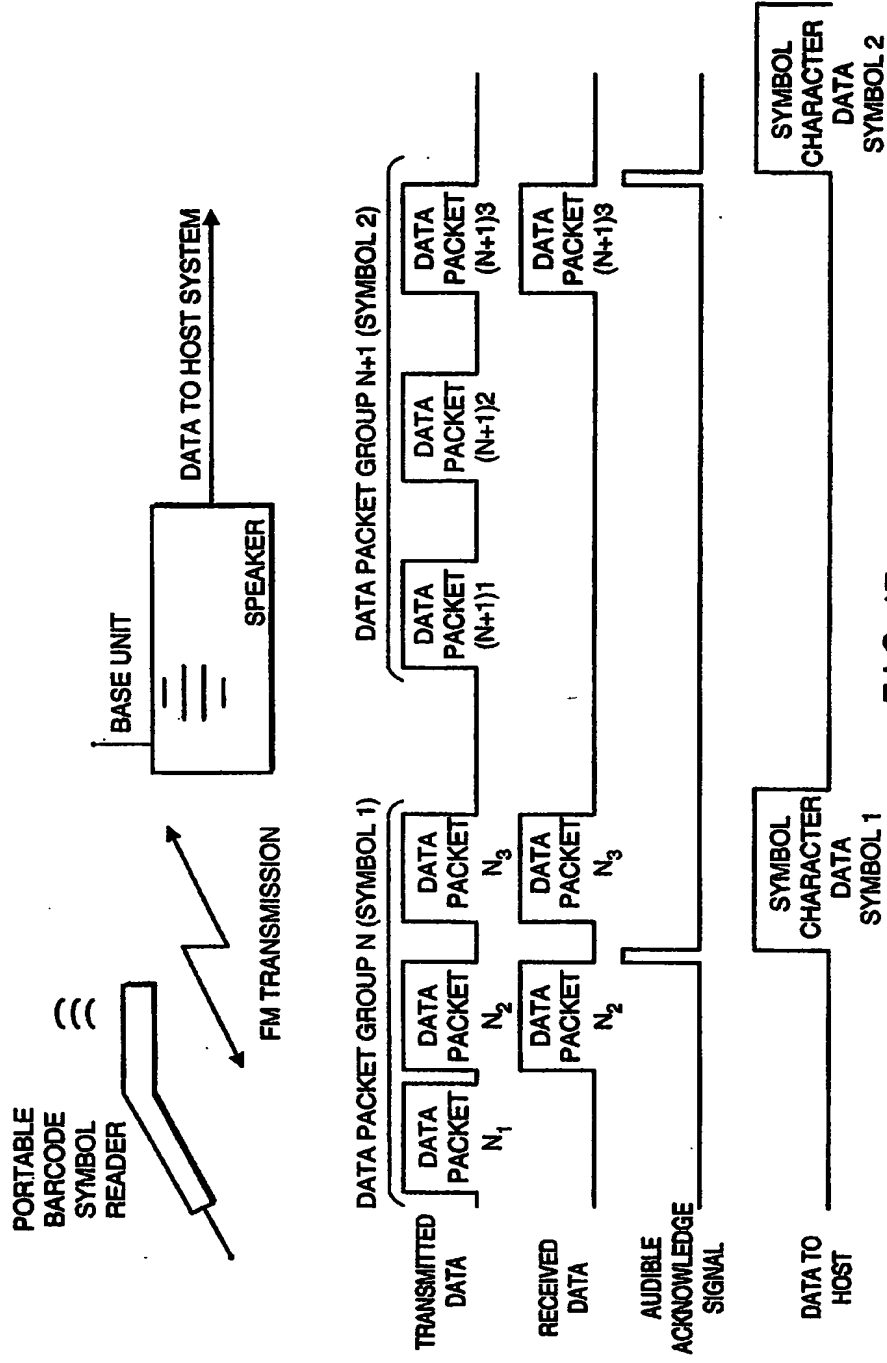


FIG. 17



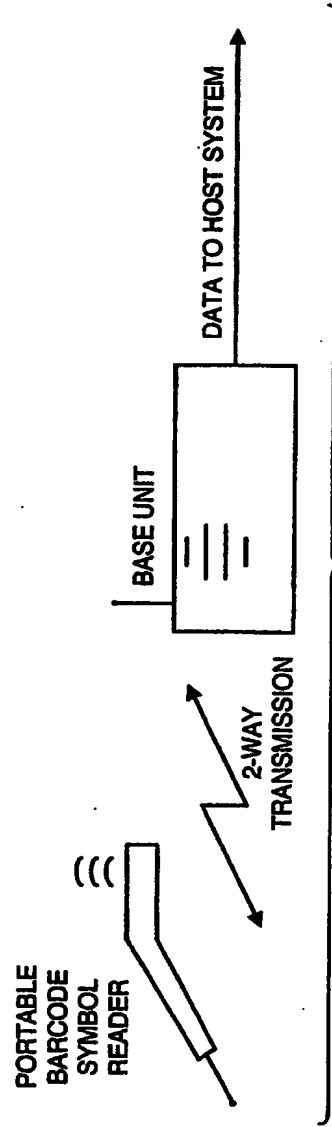


FIG. 18

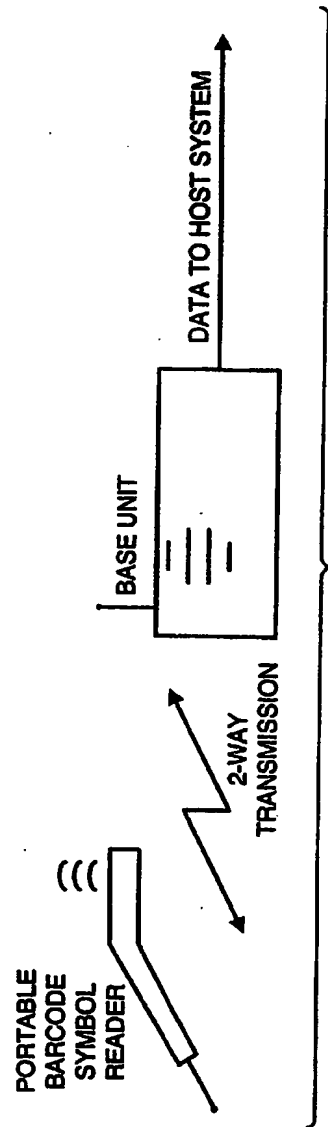


FIG. 19

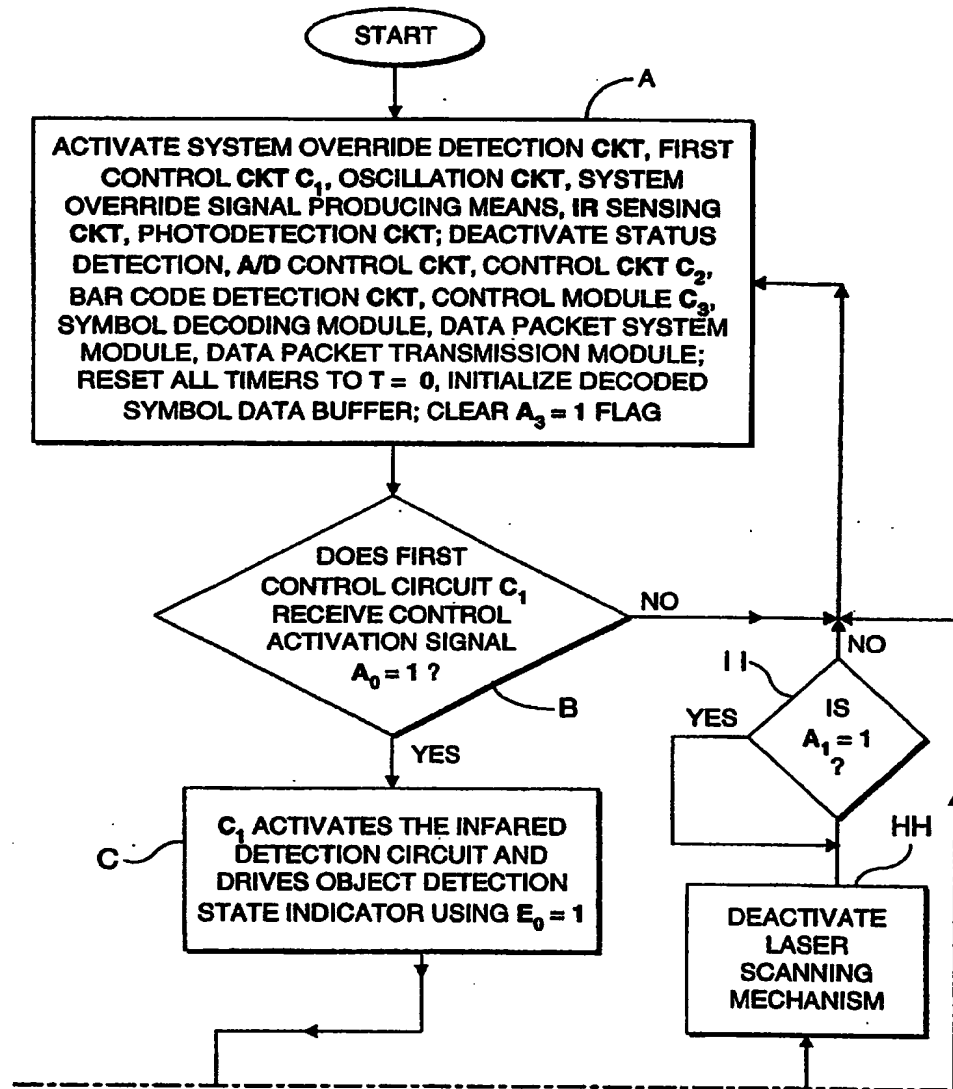
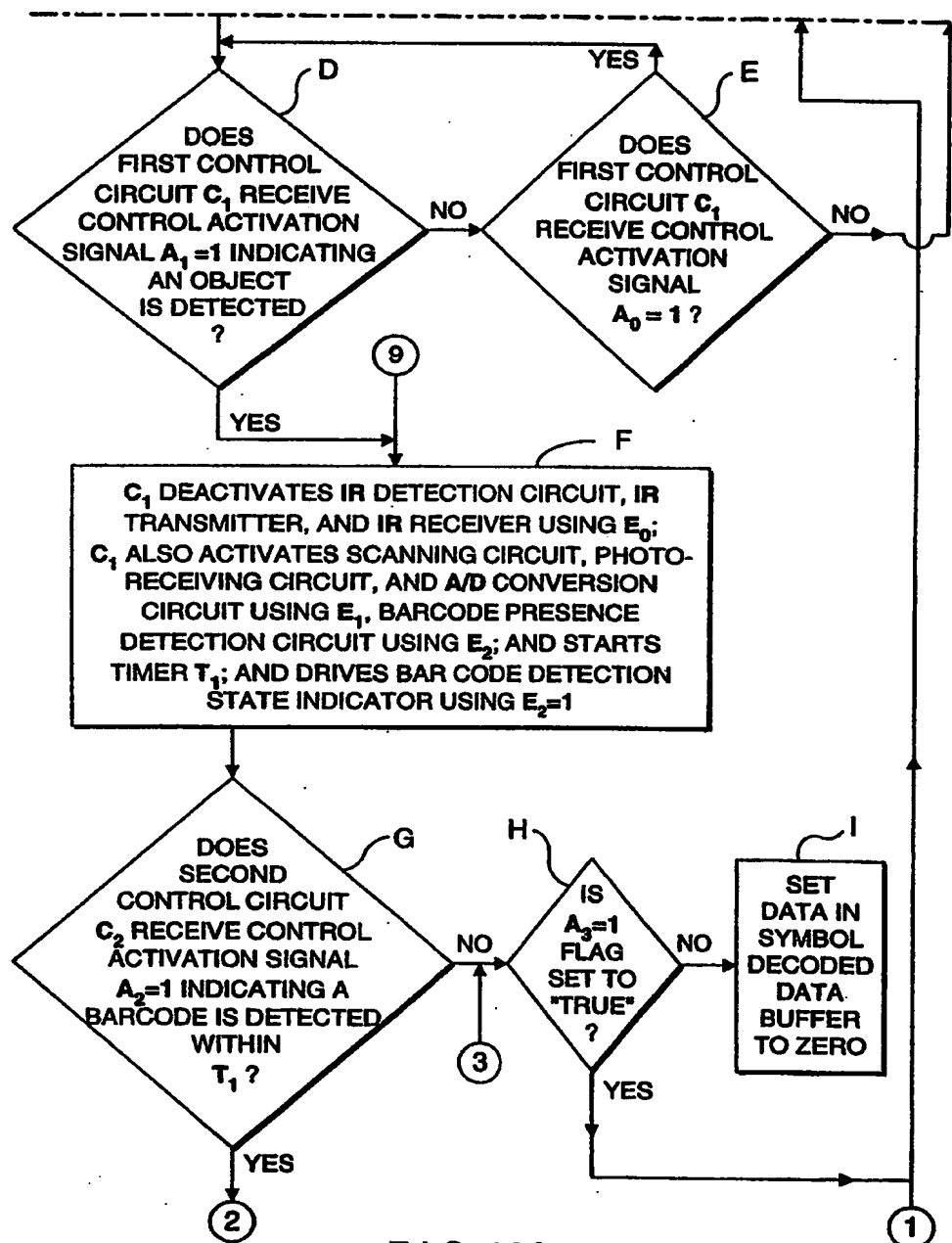


FIG. 20A1



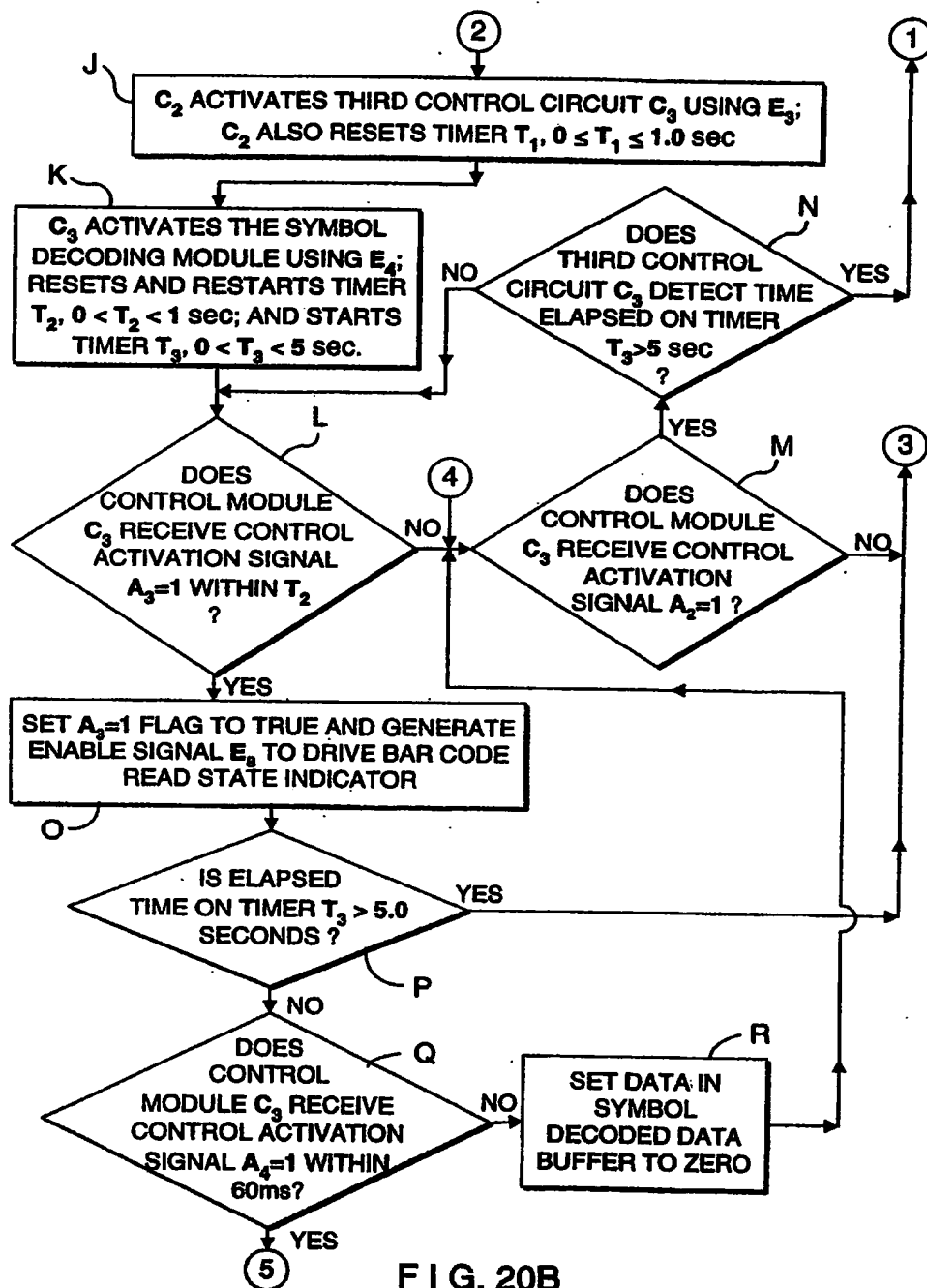


FIG. 20B

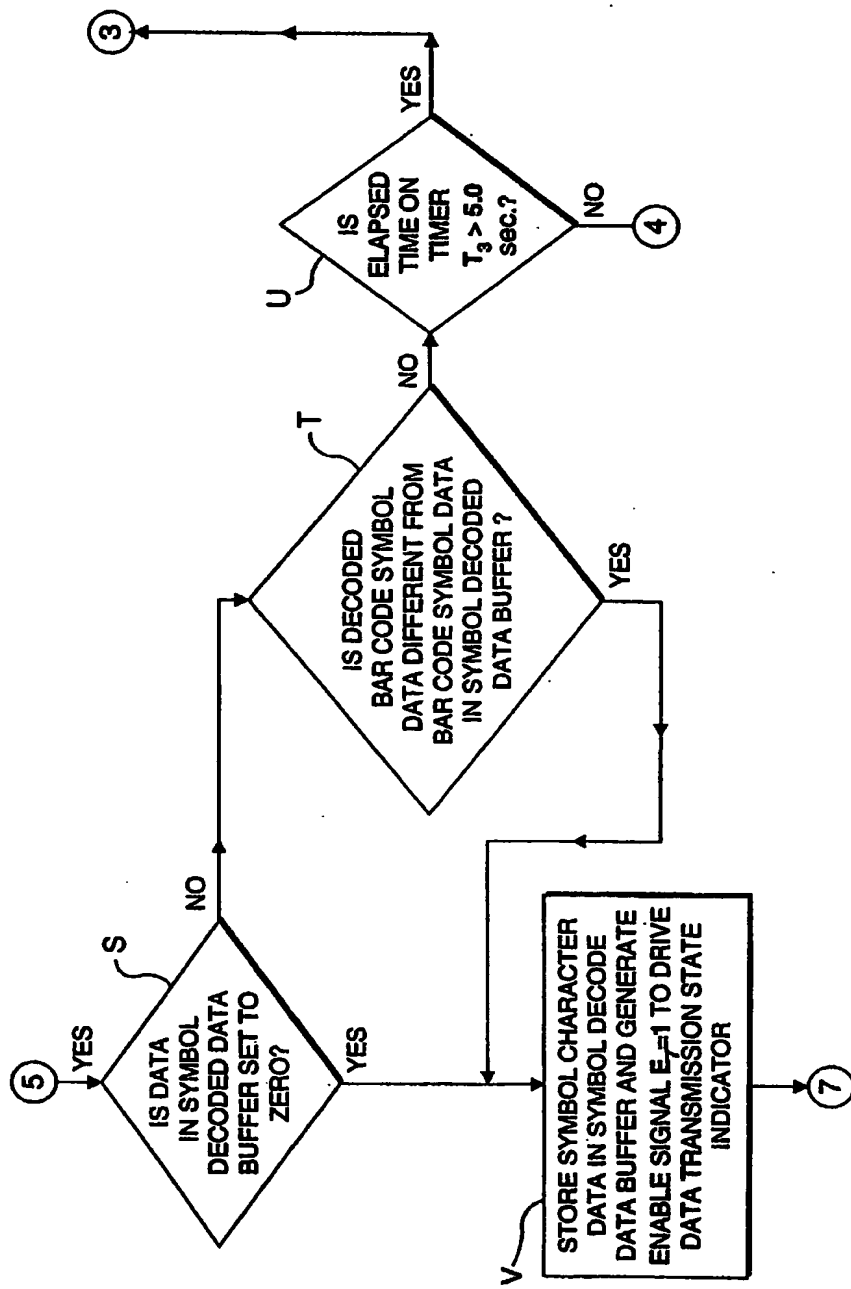


FIG. 20C

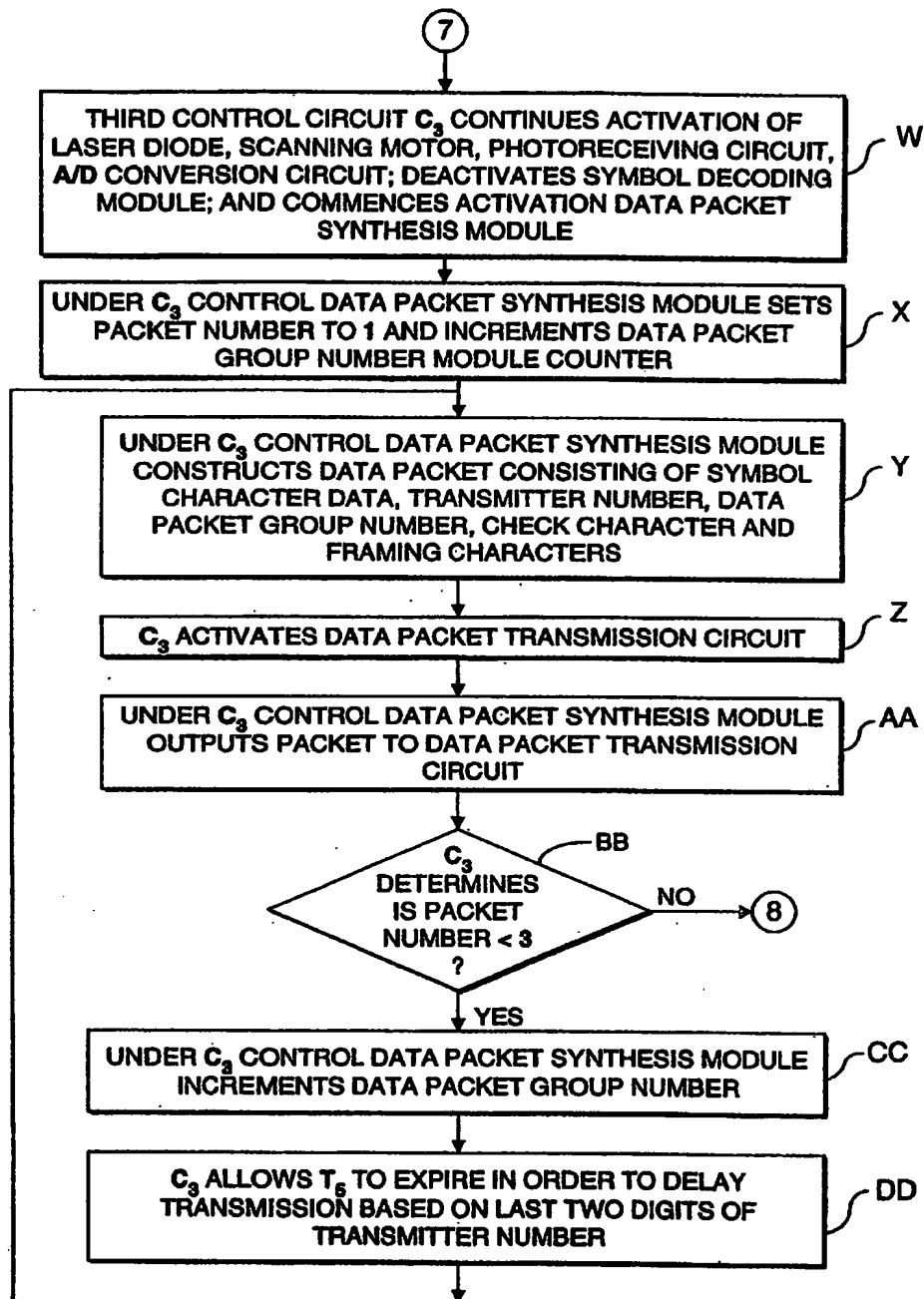


FIG. 20D

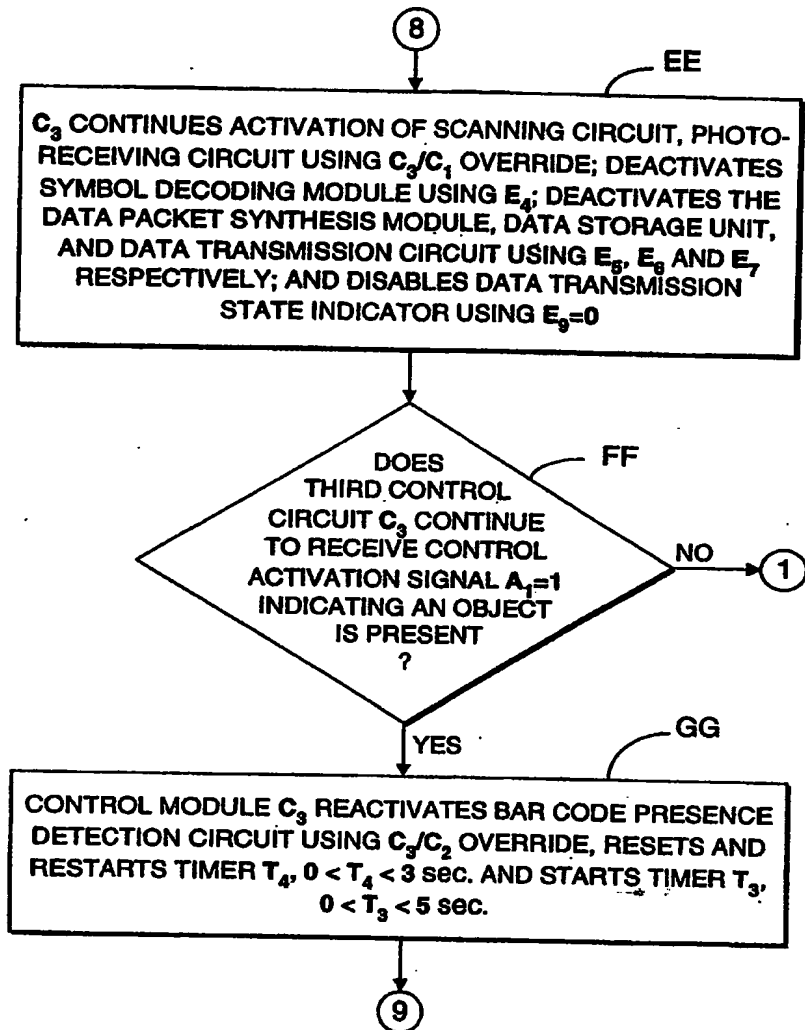
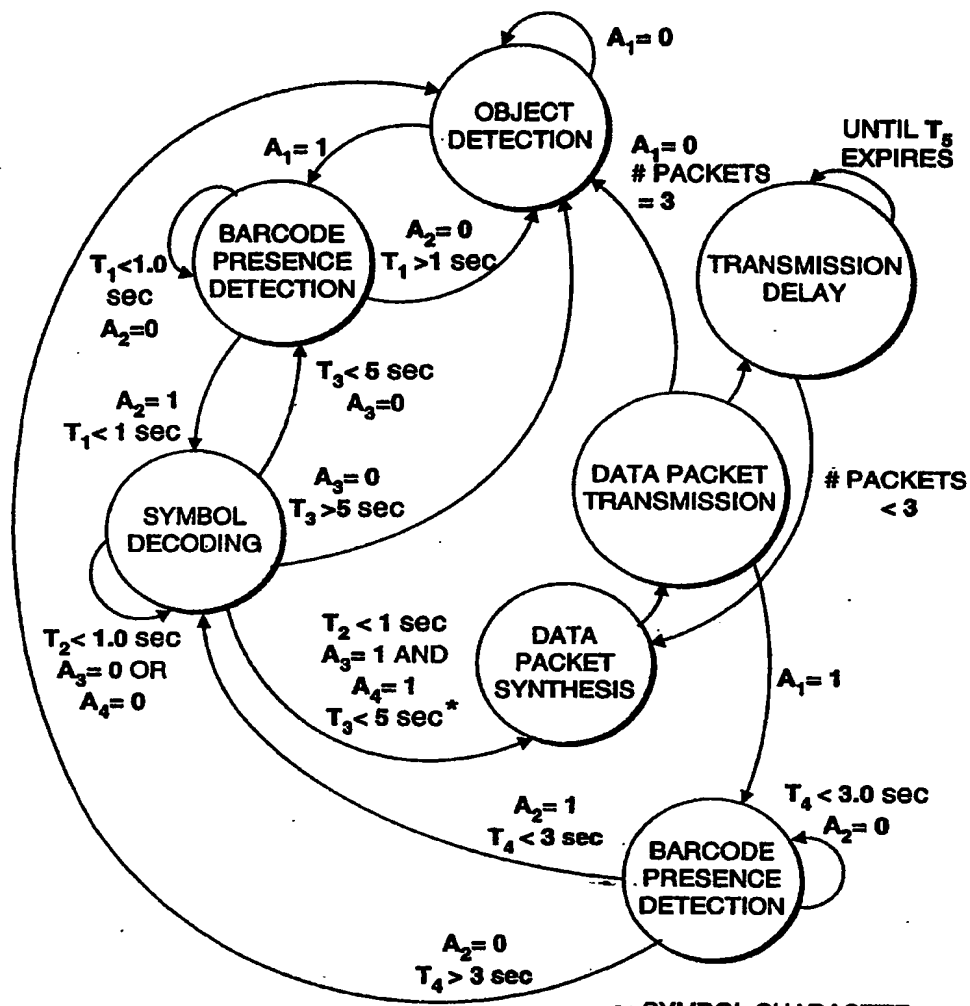


FIG. 20E



\*: SYMBOL CHARACTER  
 DATA IS DIFFERENT  
 THAN DATA ELEMENT  
 IN DECODED SYMBOL  
 DATA BUFFER

FIG. 21



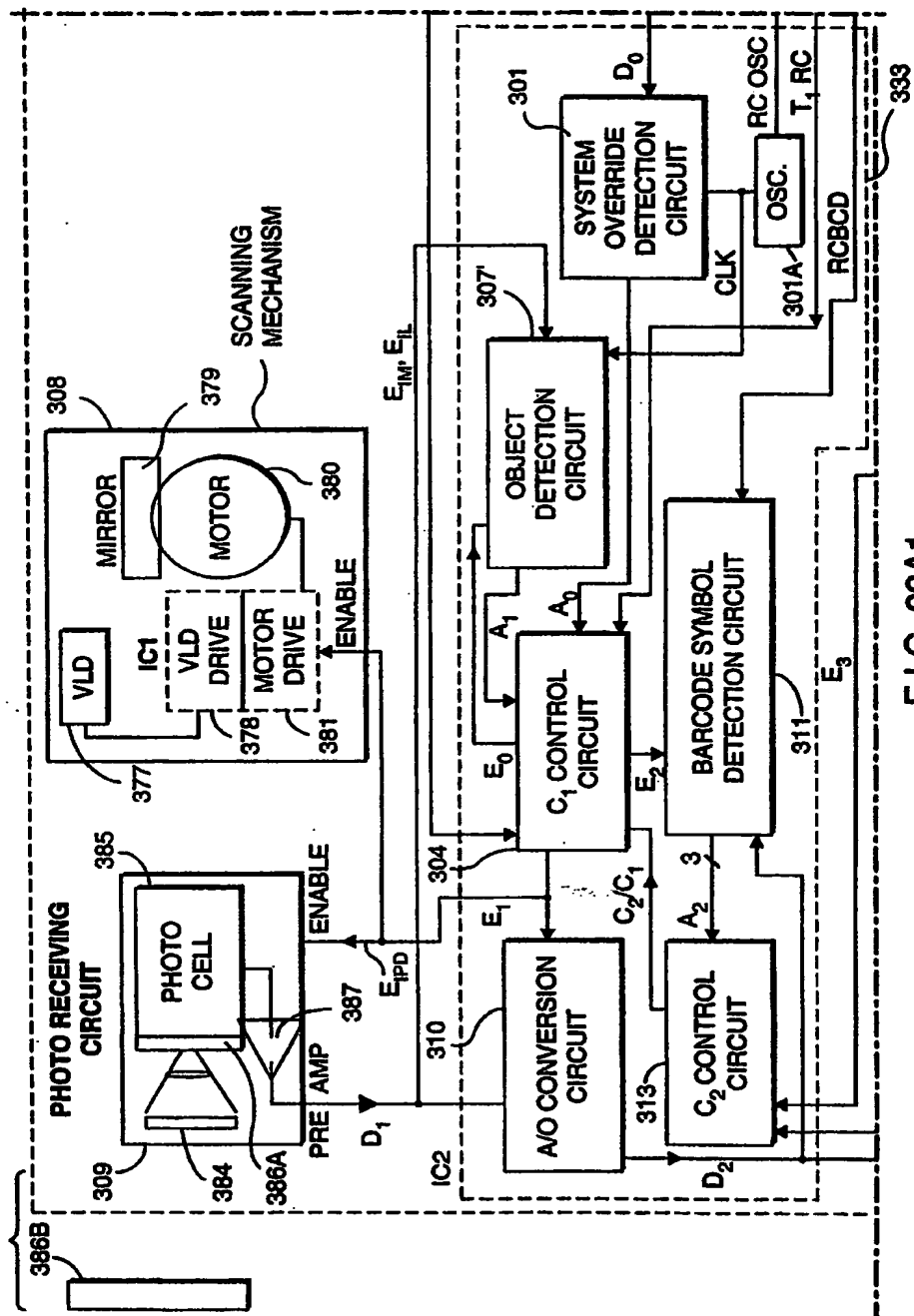


FIG. 22A1

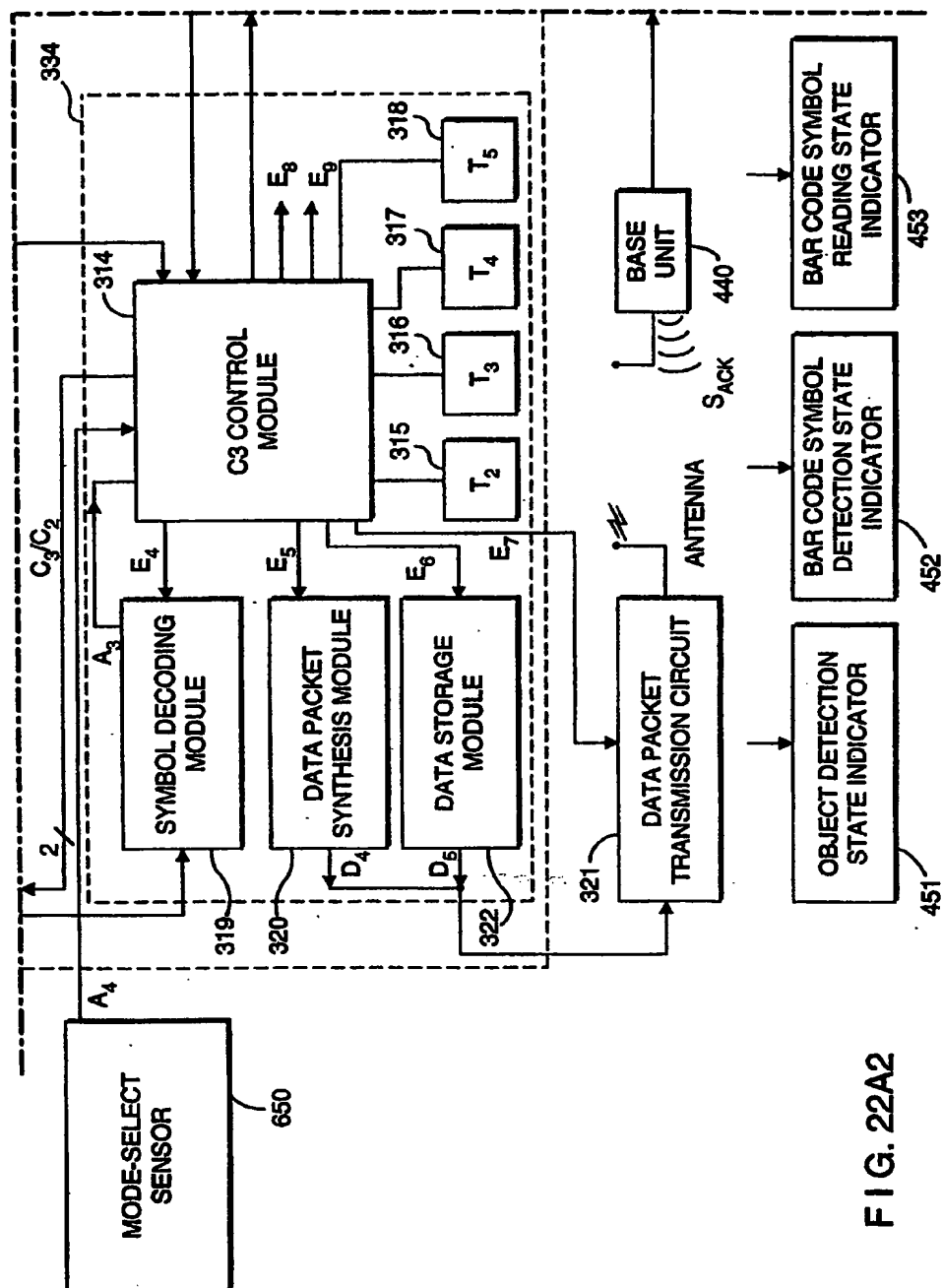


FIG. 22A2

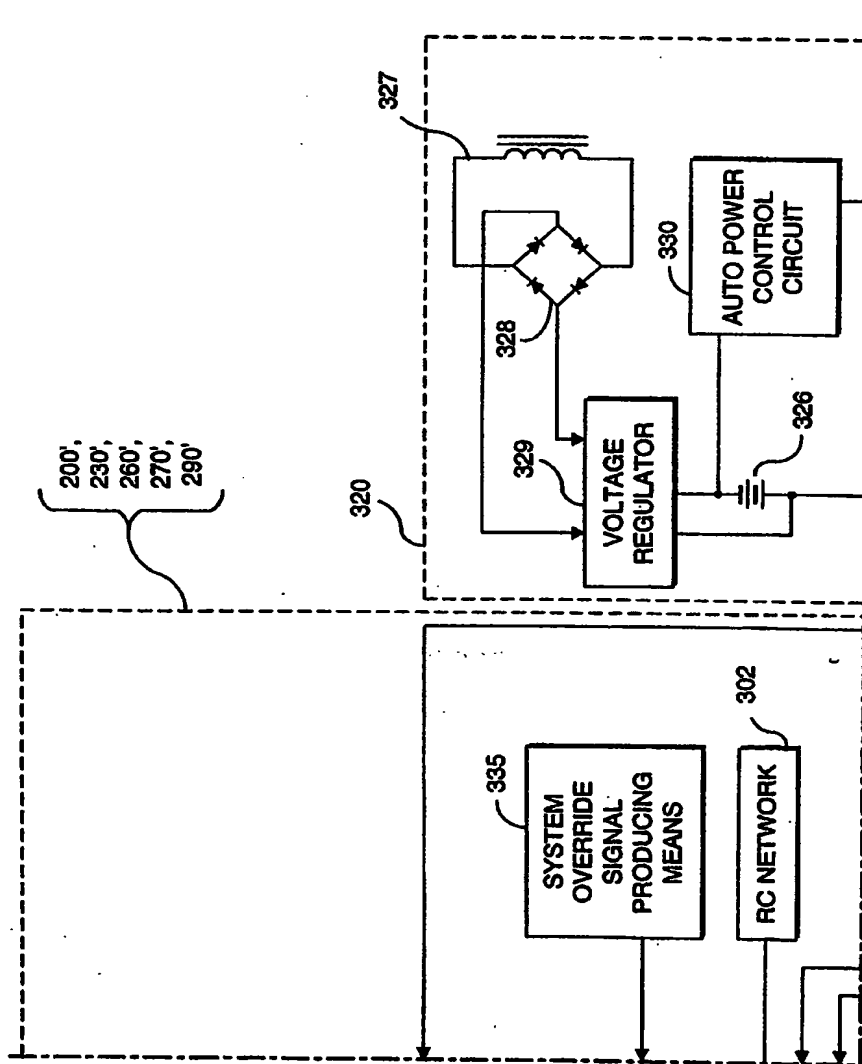


FIG. 22A3

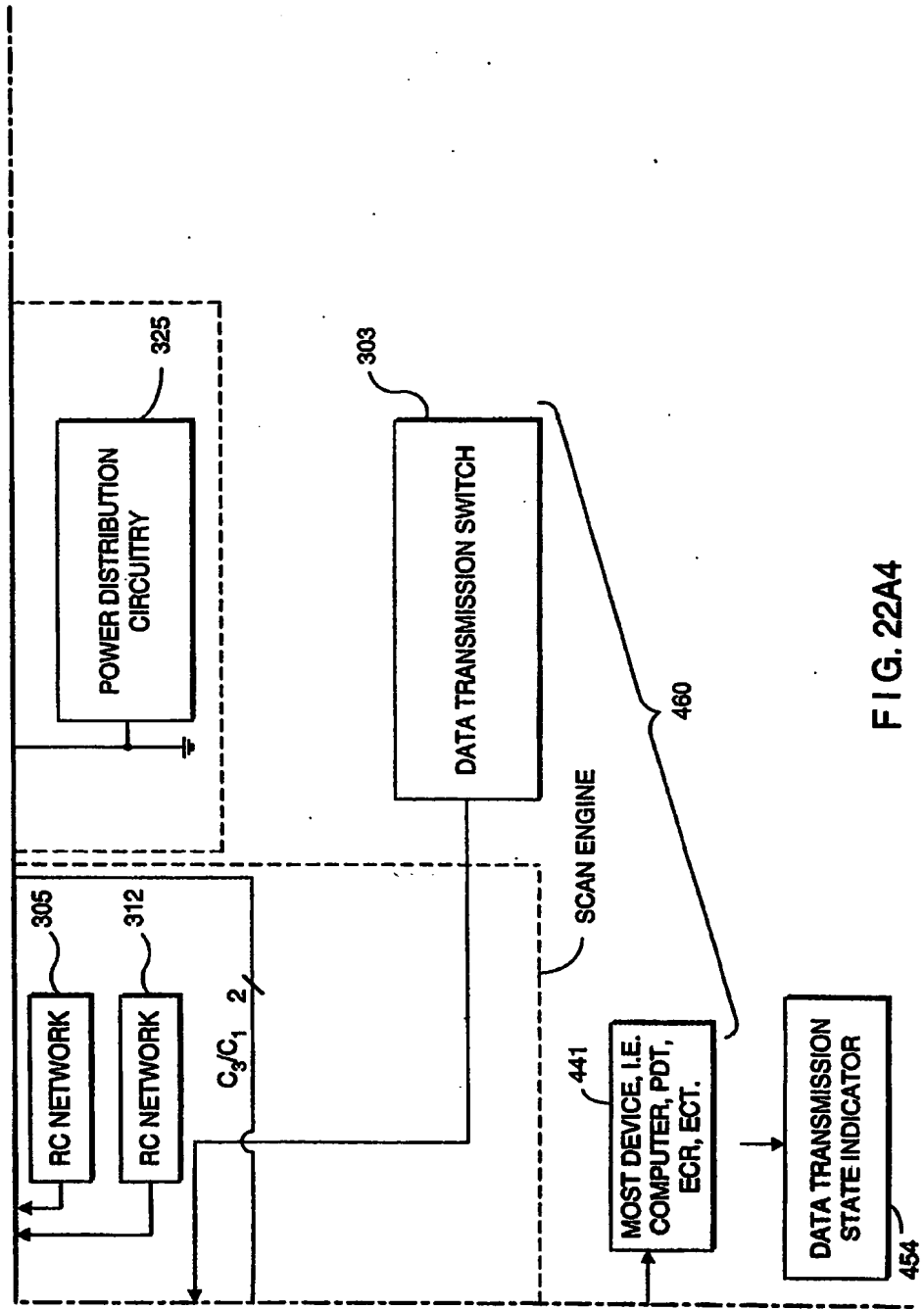


FIG. 22A4

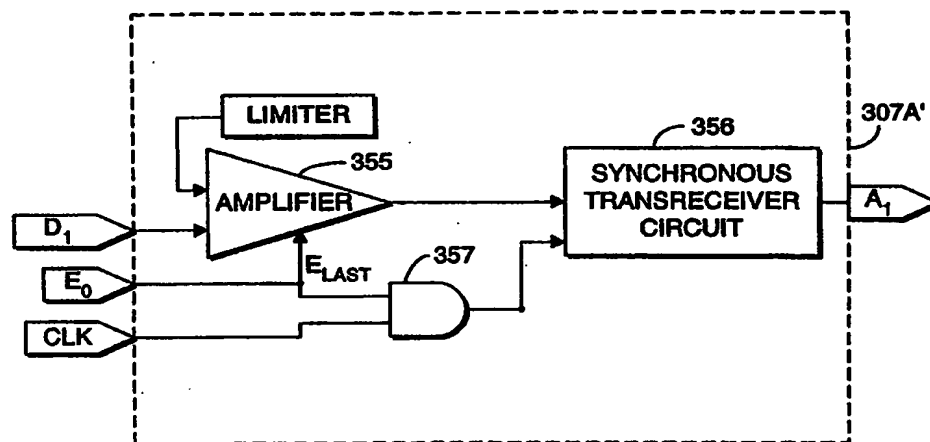
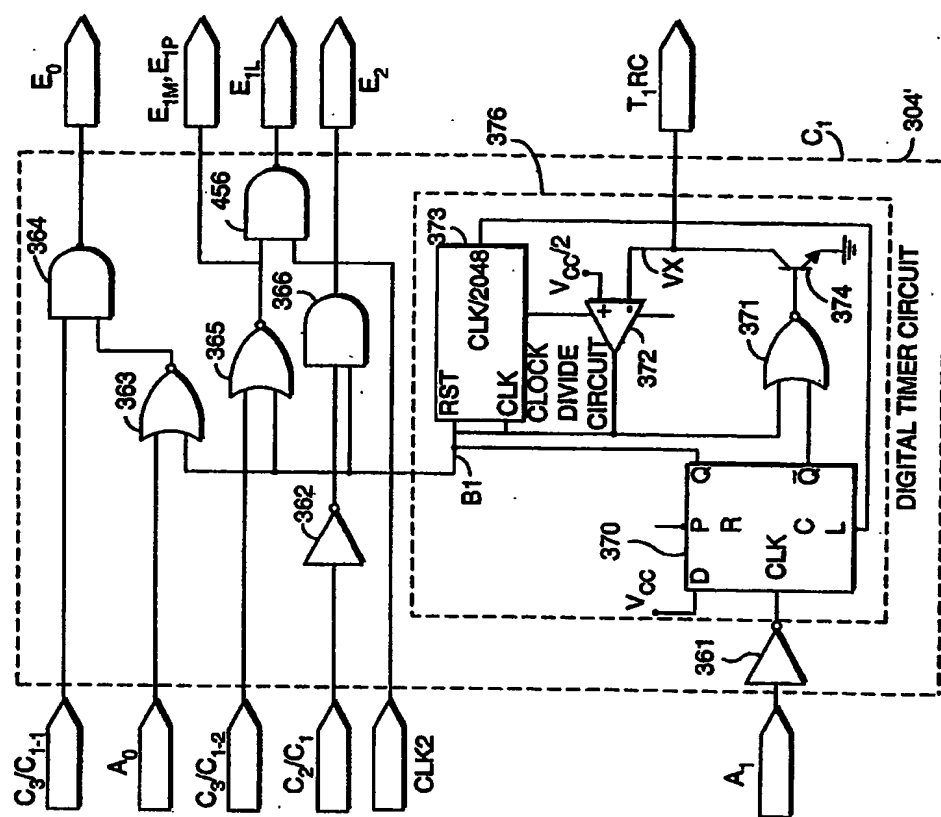


FIG. 22B



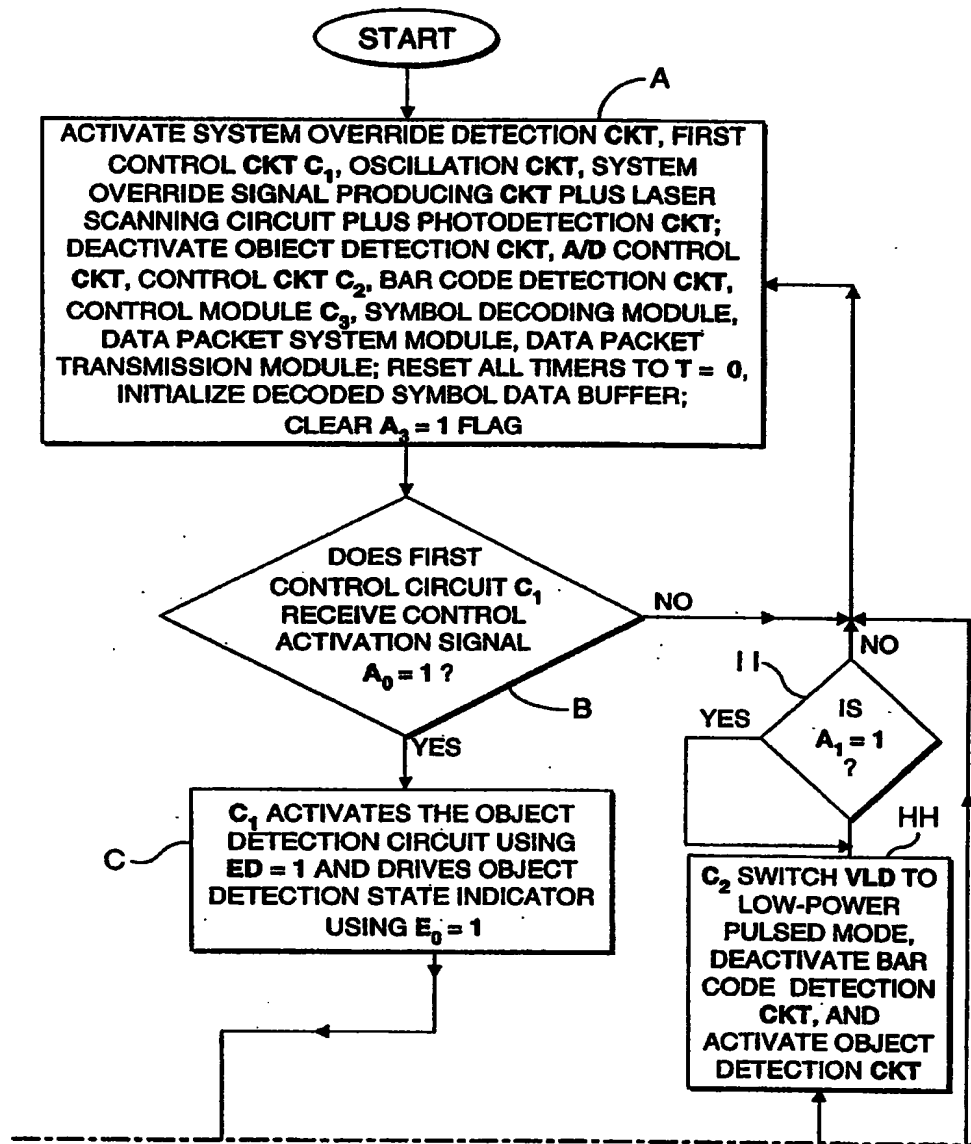
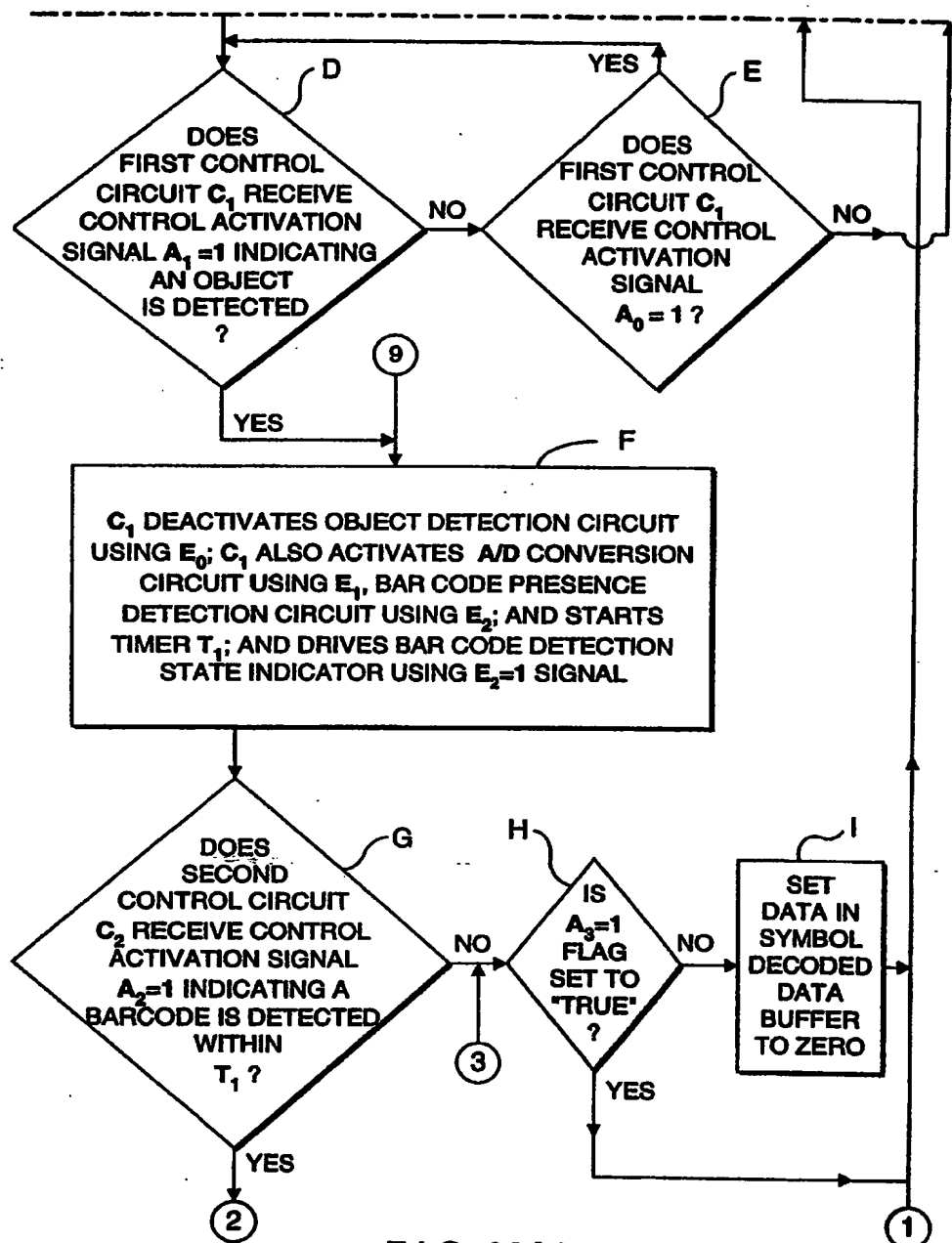


FIG. 23A1





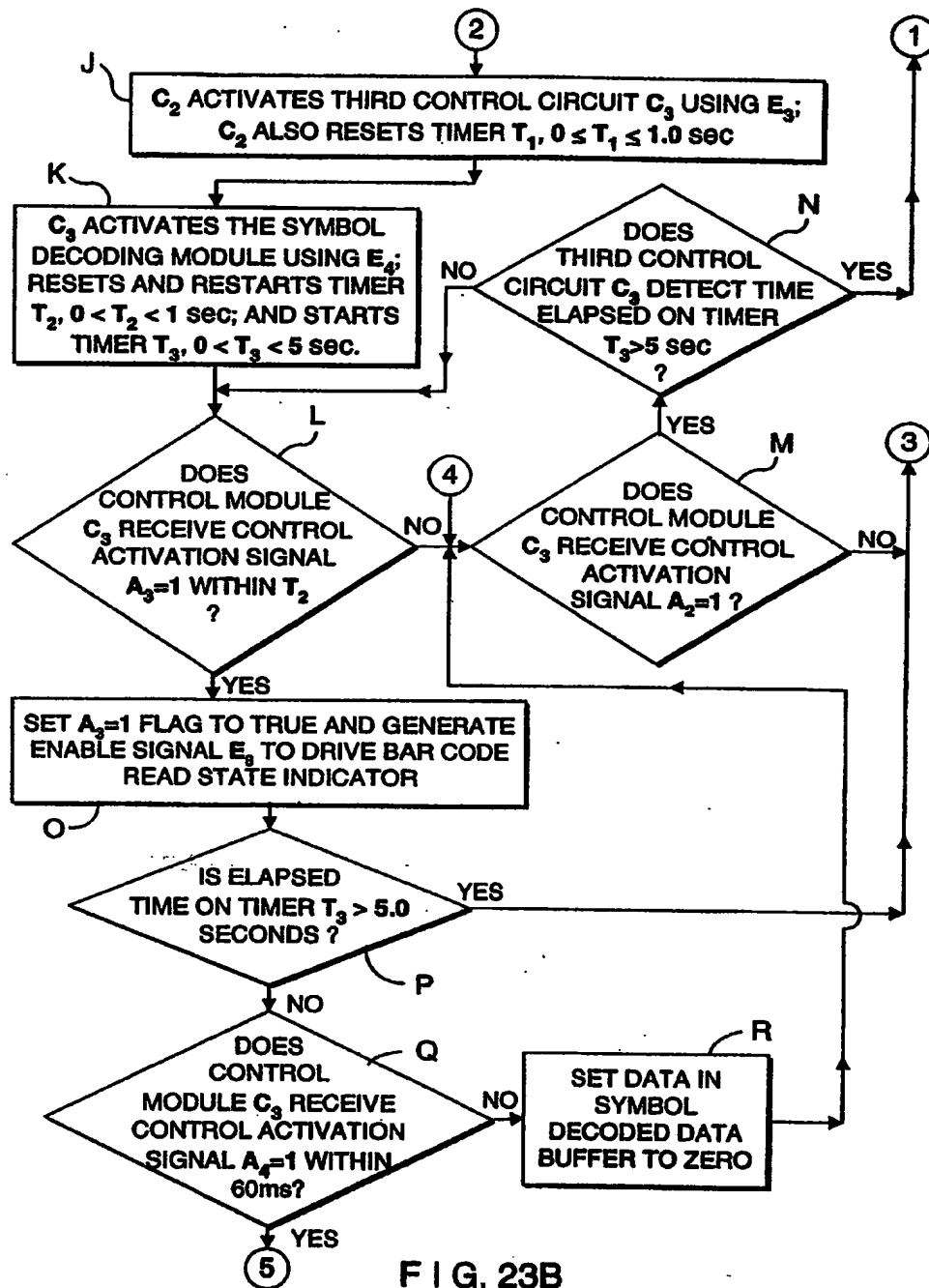


FIG. 23B

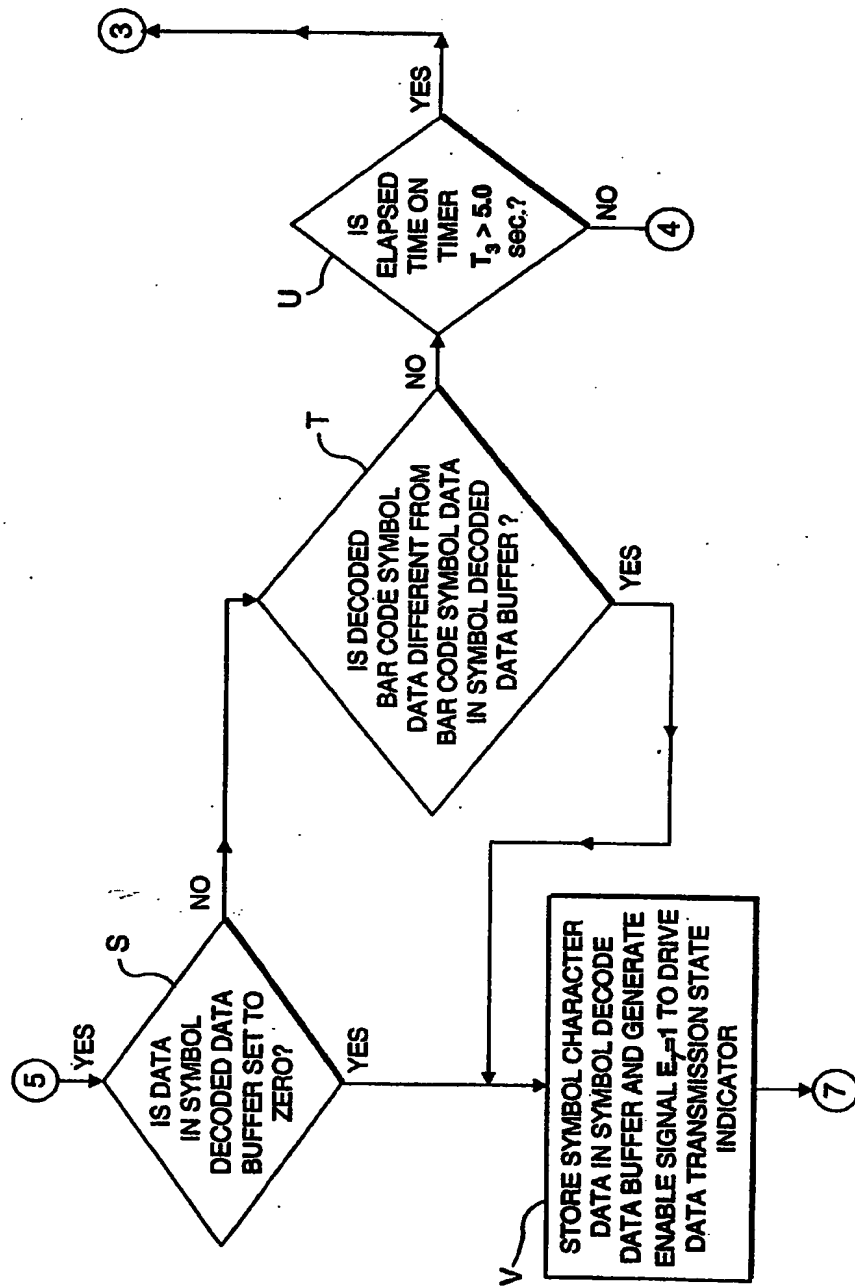


FIG. 23C

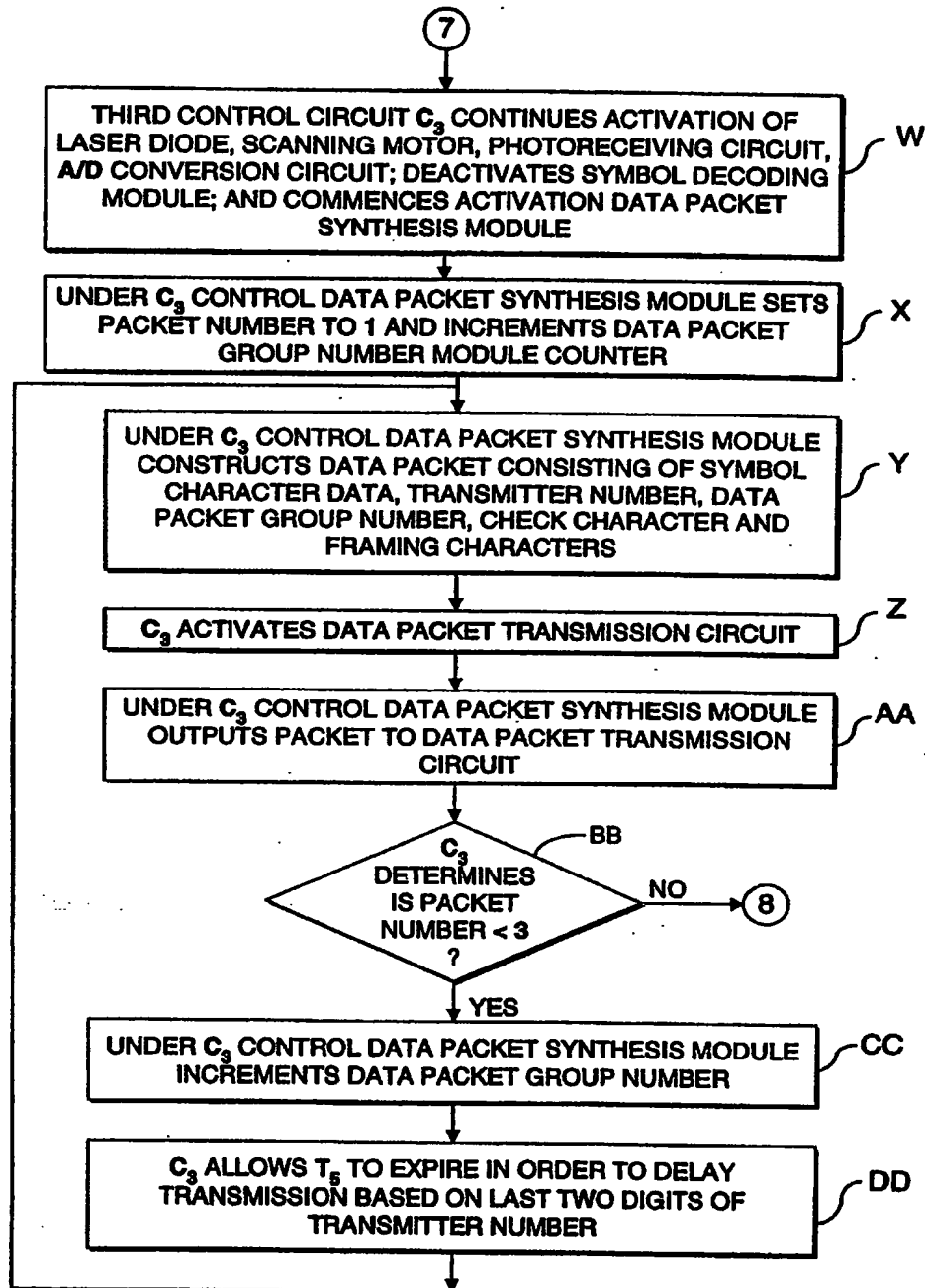


FIG. 23D

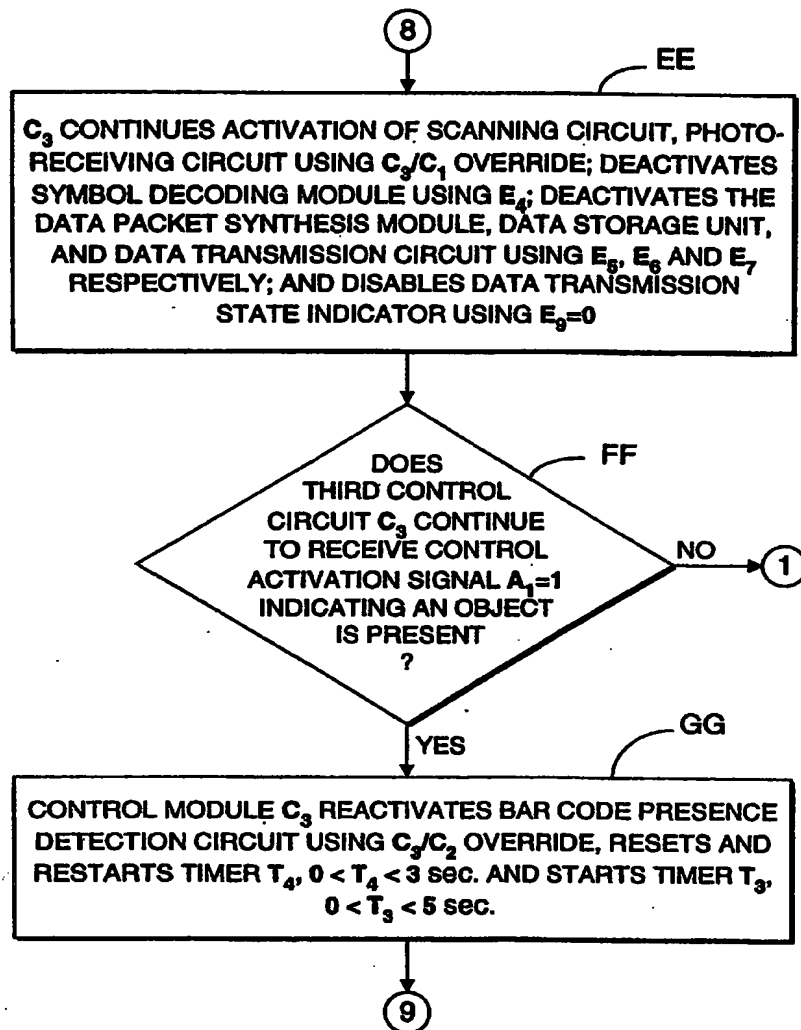


FIG. 23E

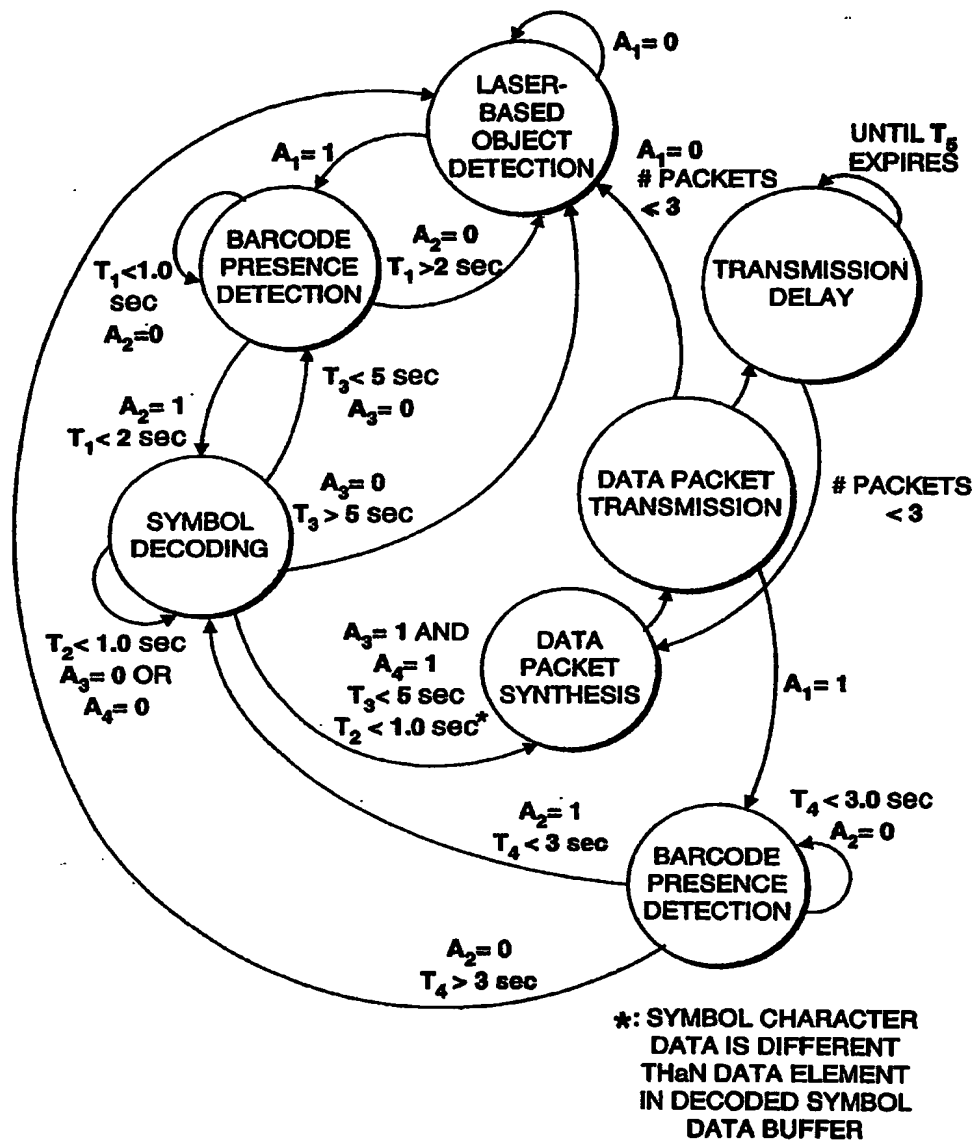


FIG. 24

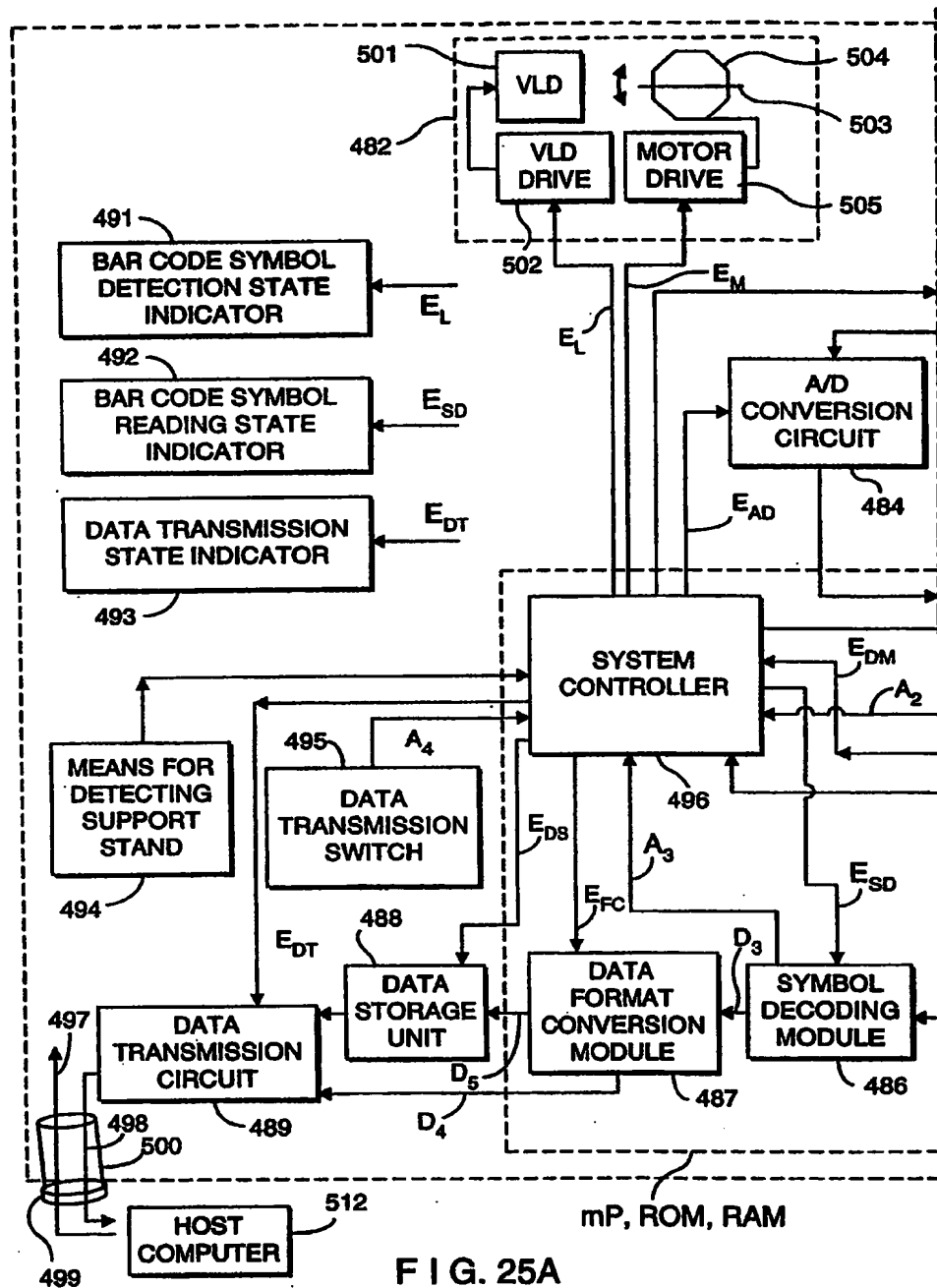


FIG. 25A

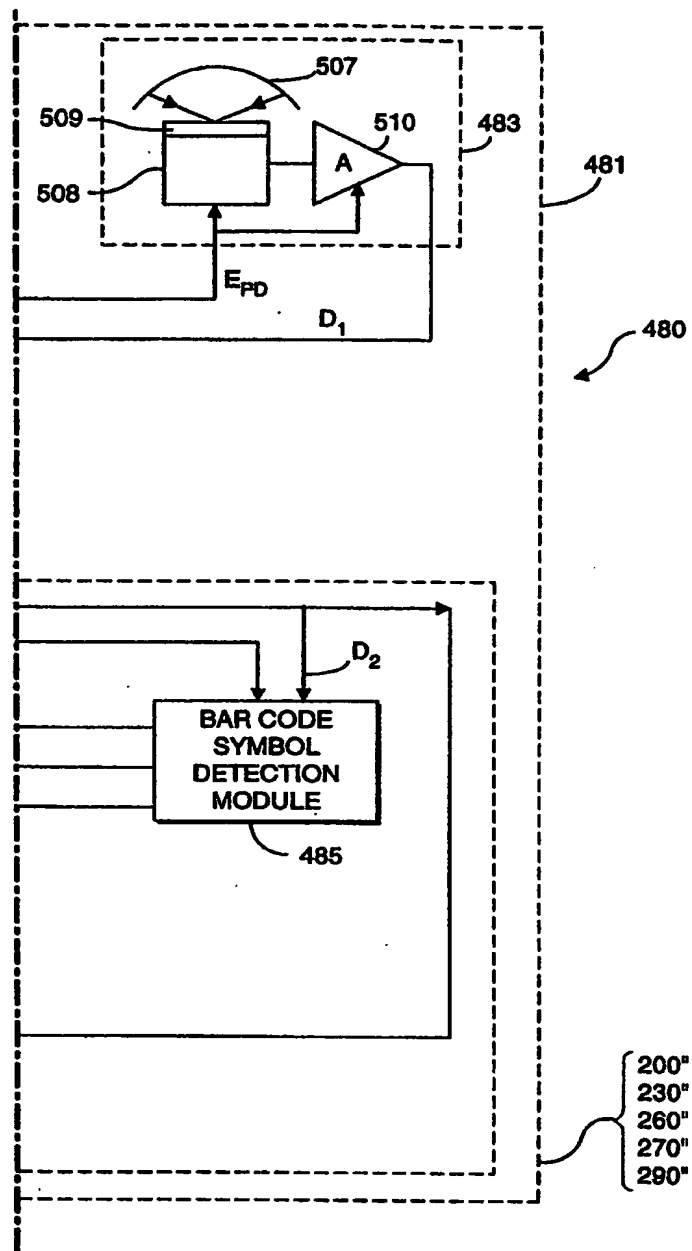
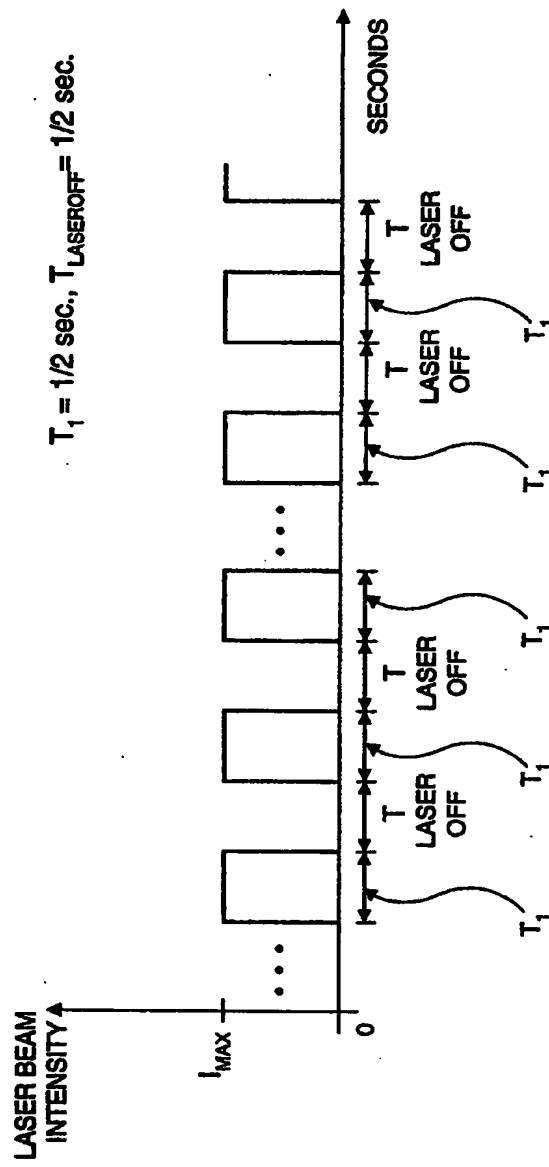


FIG. 25B



**FIG. 26**



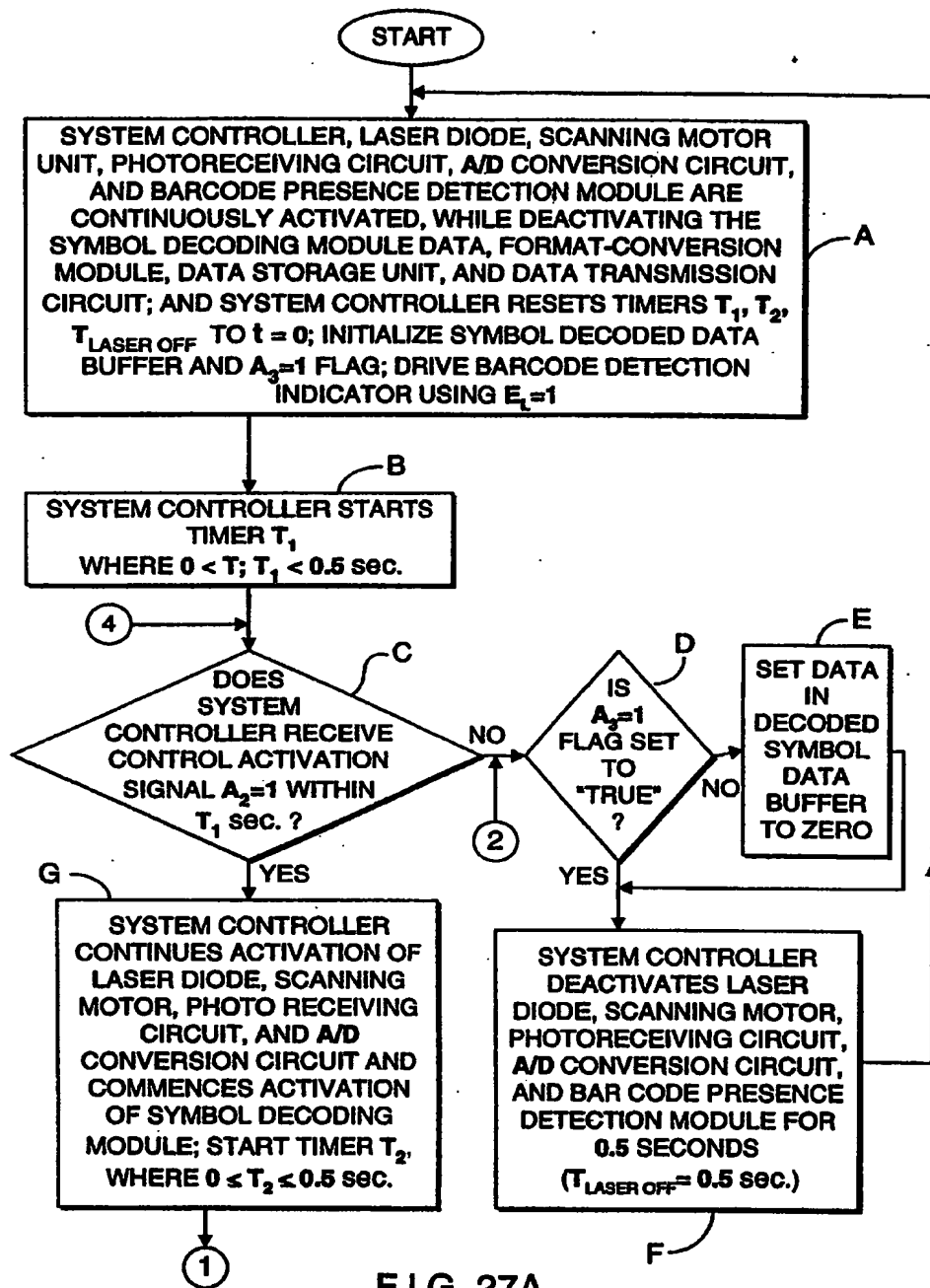


FIG. 27A

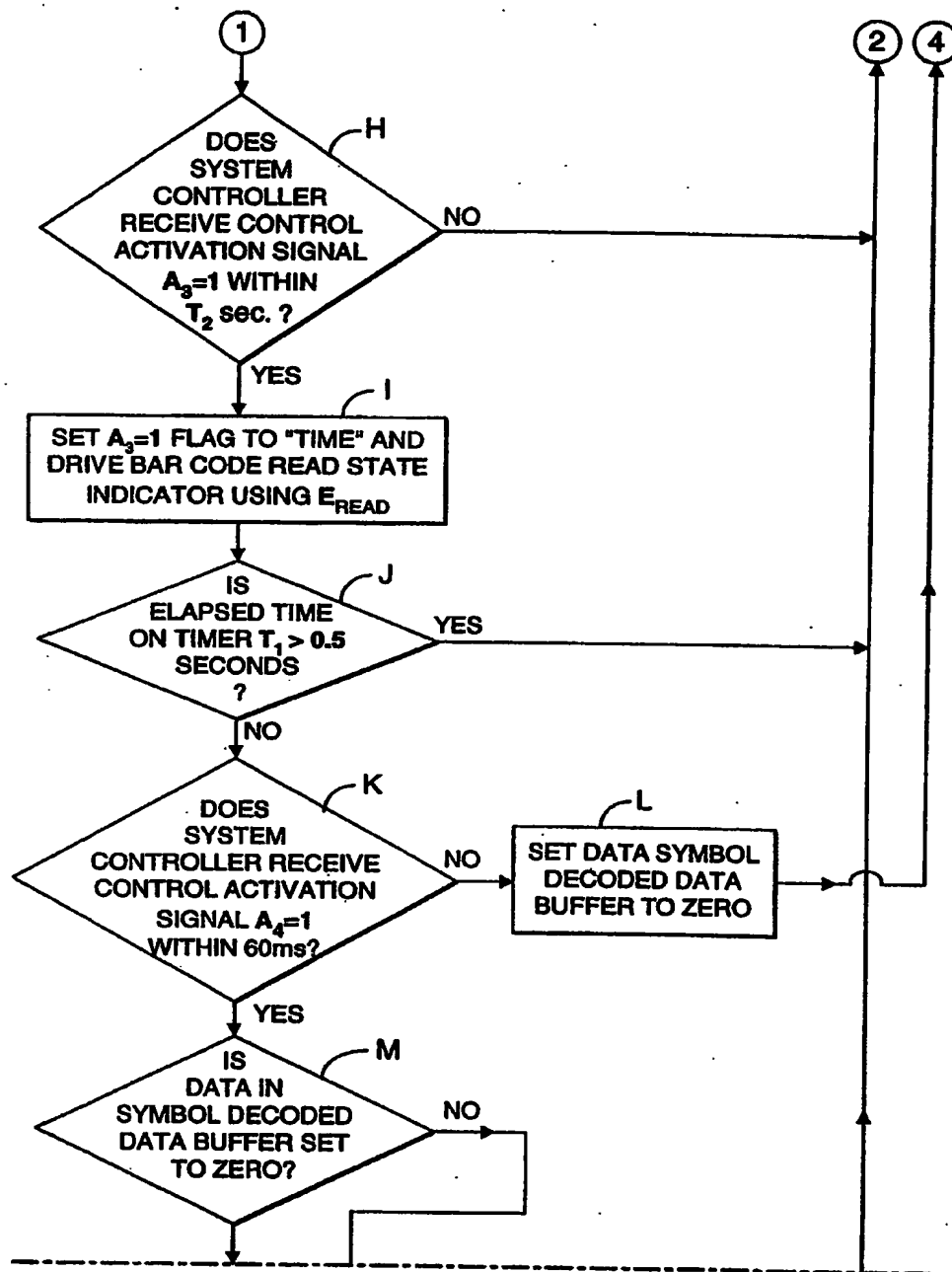


FIG. 27B1

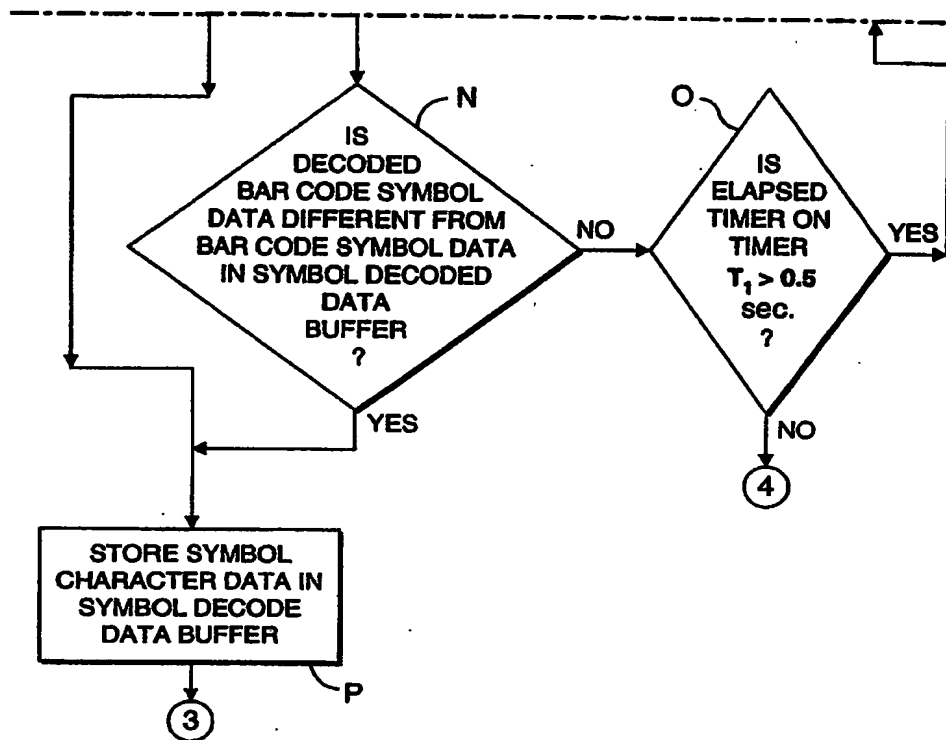


FIG. 27B2

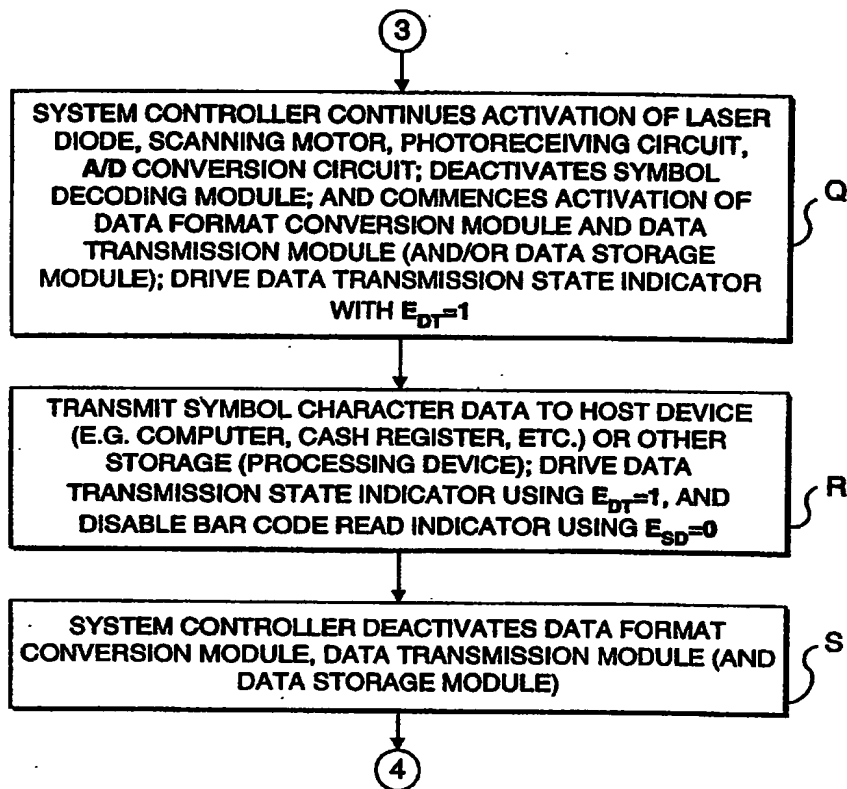


FIG. 27C

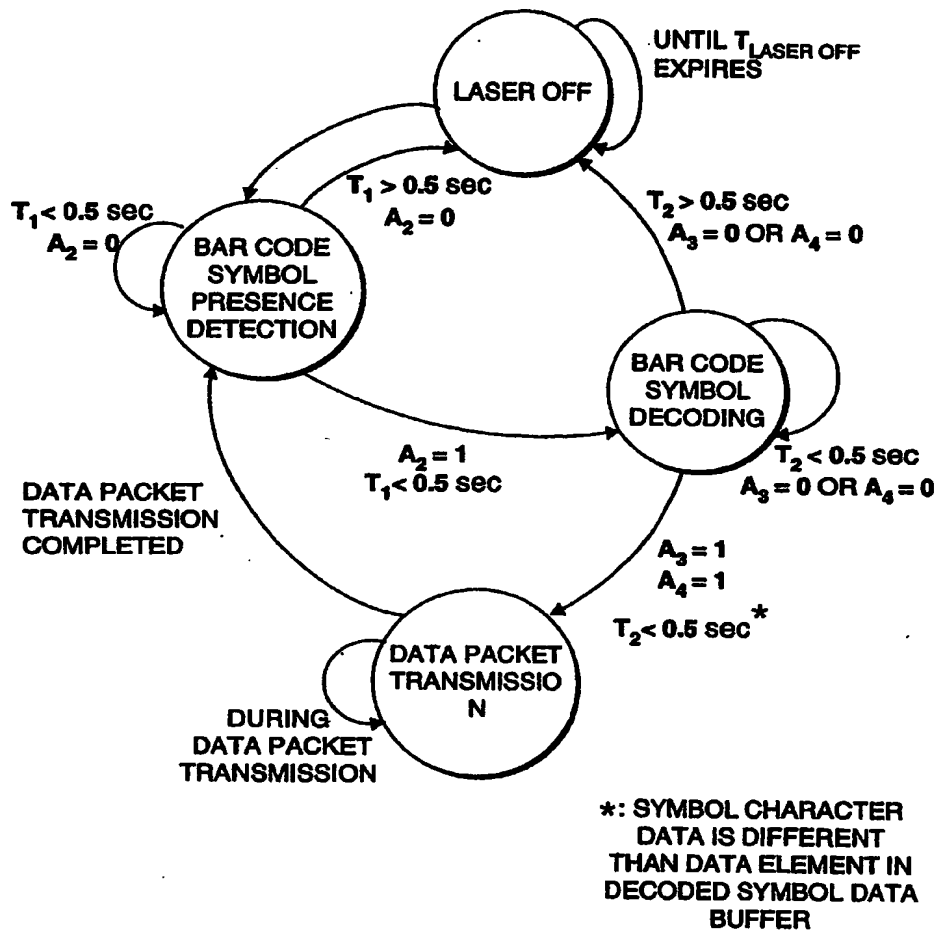


FIG. 28

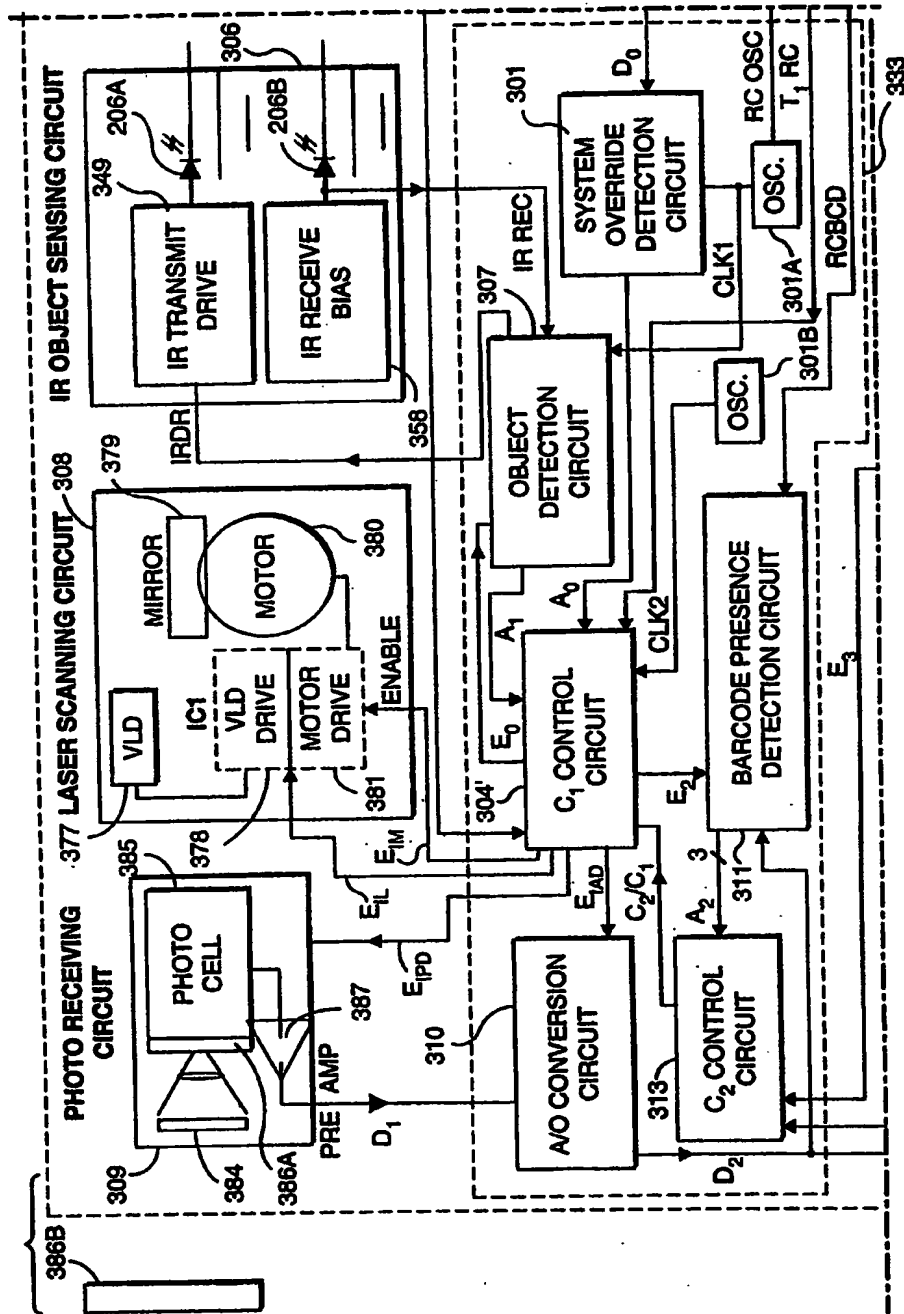


FIG. 29A1

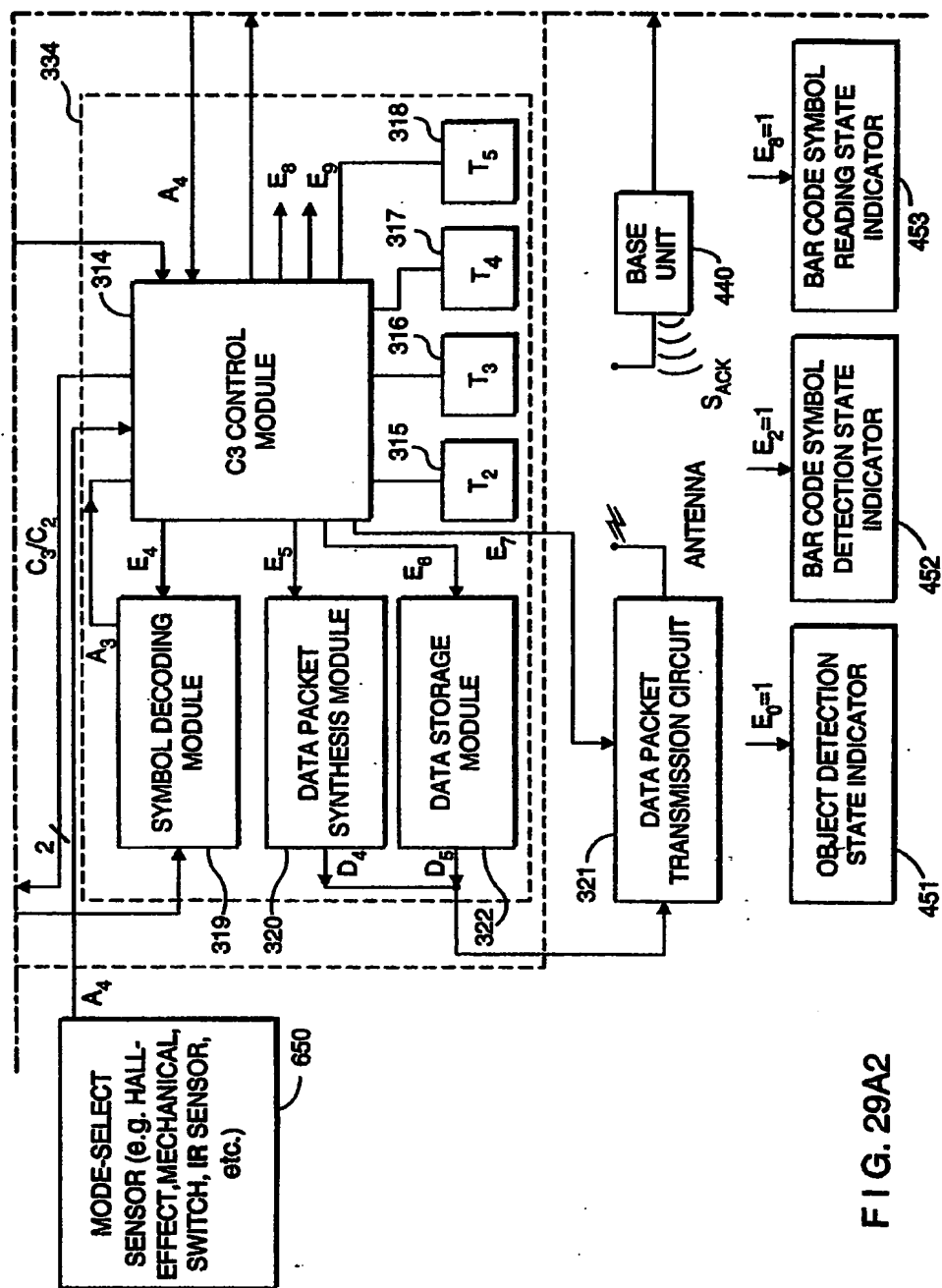


FIG. 29A2

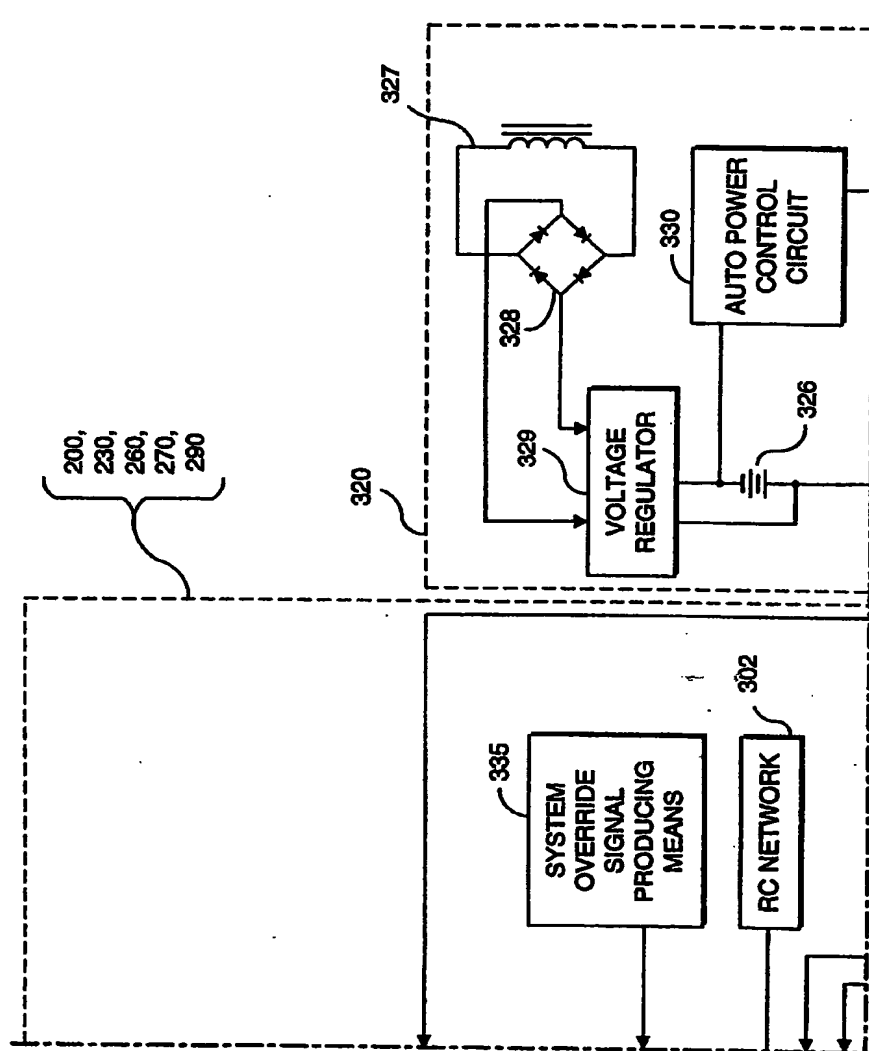


FIG. 29A3



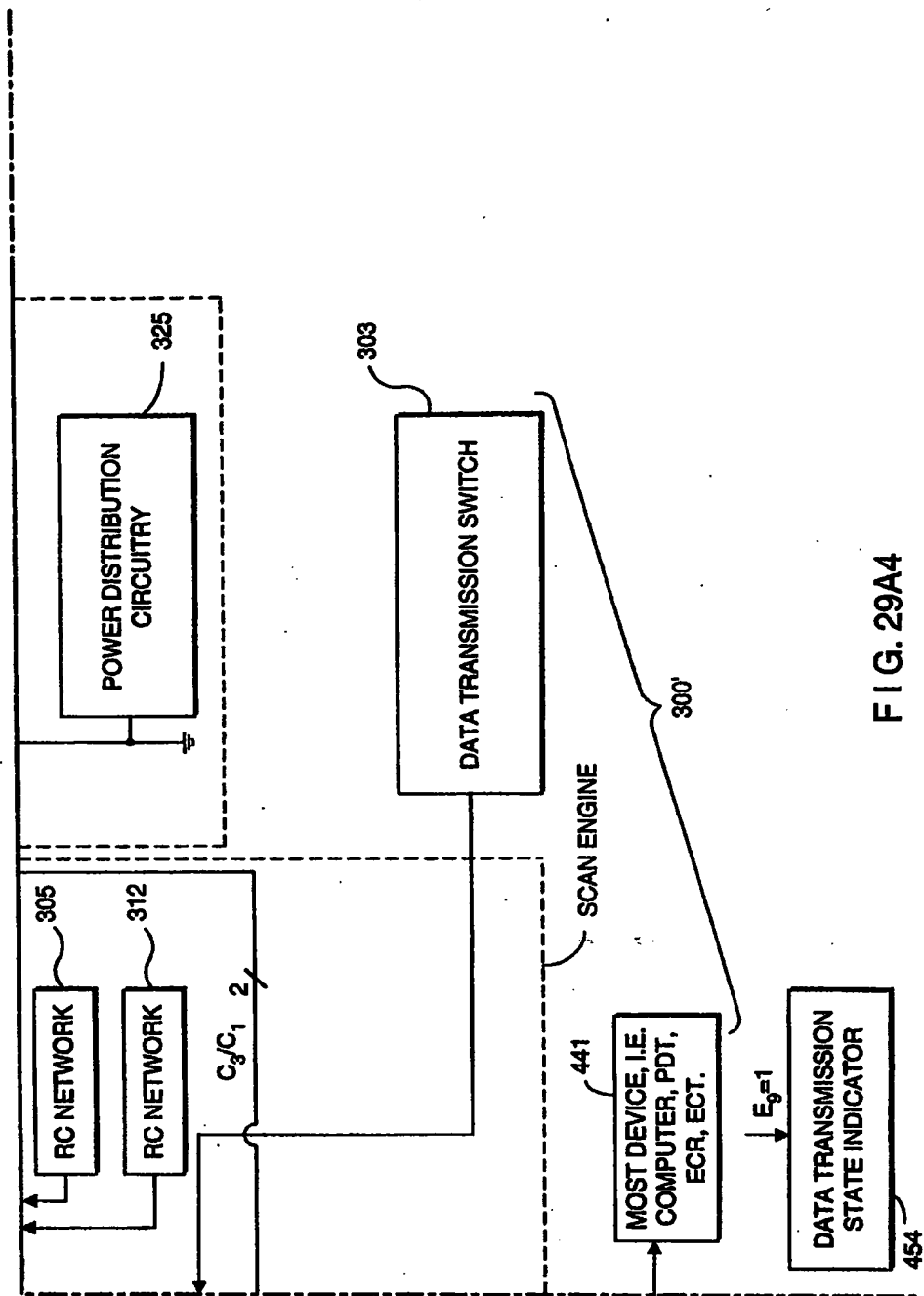


FIG. 29A4

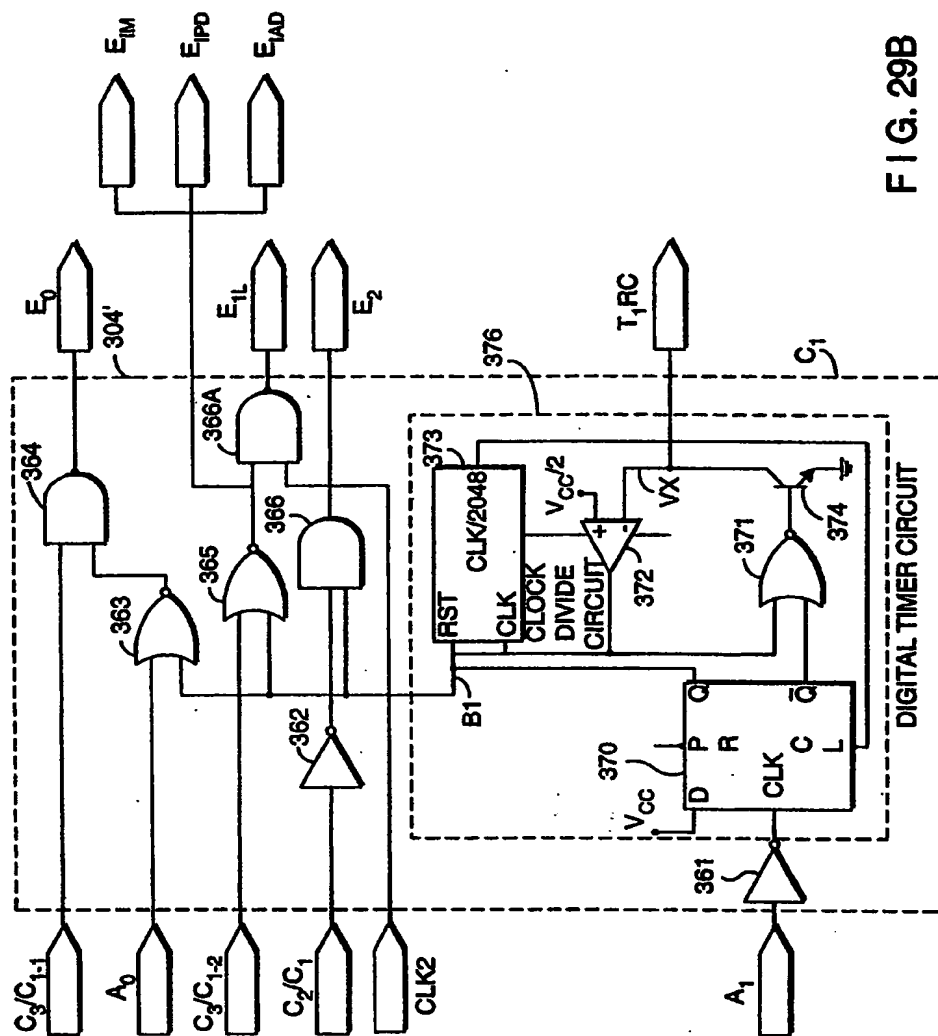


FIG. 29B

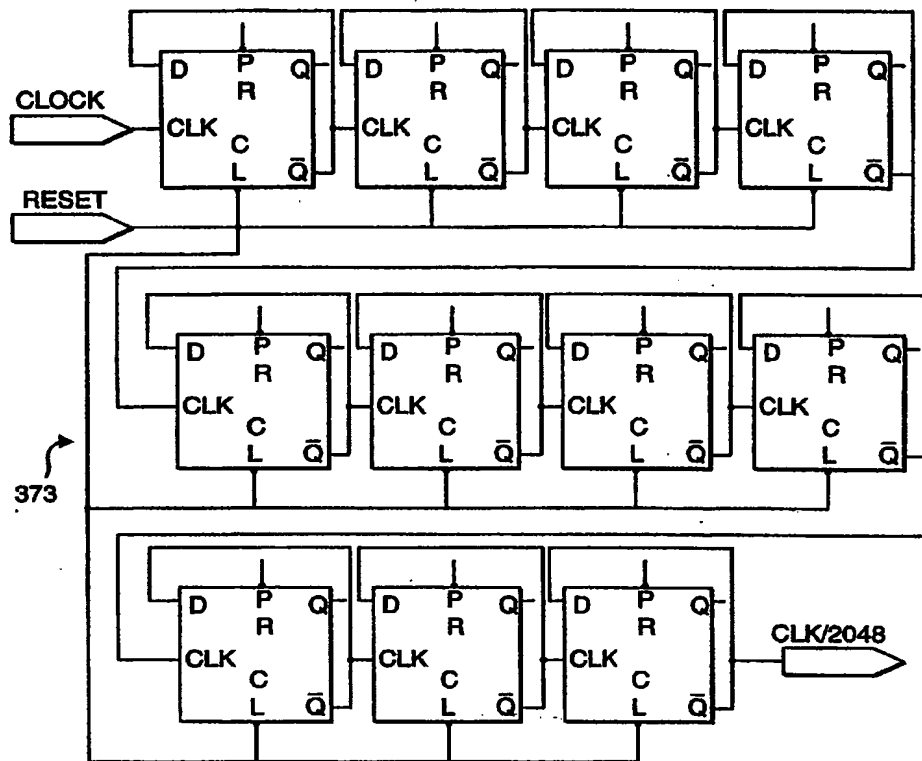


FIG. 29C

$$\left\{ \begin{array}{l} E_0 = \overline{(B1 + A_0) (C_3 / C_{1-1})} \\ E_{IM} = E_{IPD} = E_{IAD} = \overline{(C_3 / C_{1-2}) + B1} \\ E_L = \overline{[(C_3 / C_{1-1}) + B1] [B2]} \\ E_2 = \overline{(C_2 / C_1) (B1)} \end{array} \right.$$

FIG. 29D

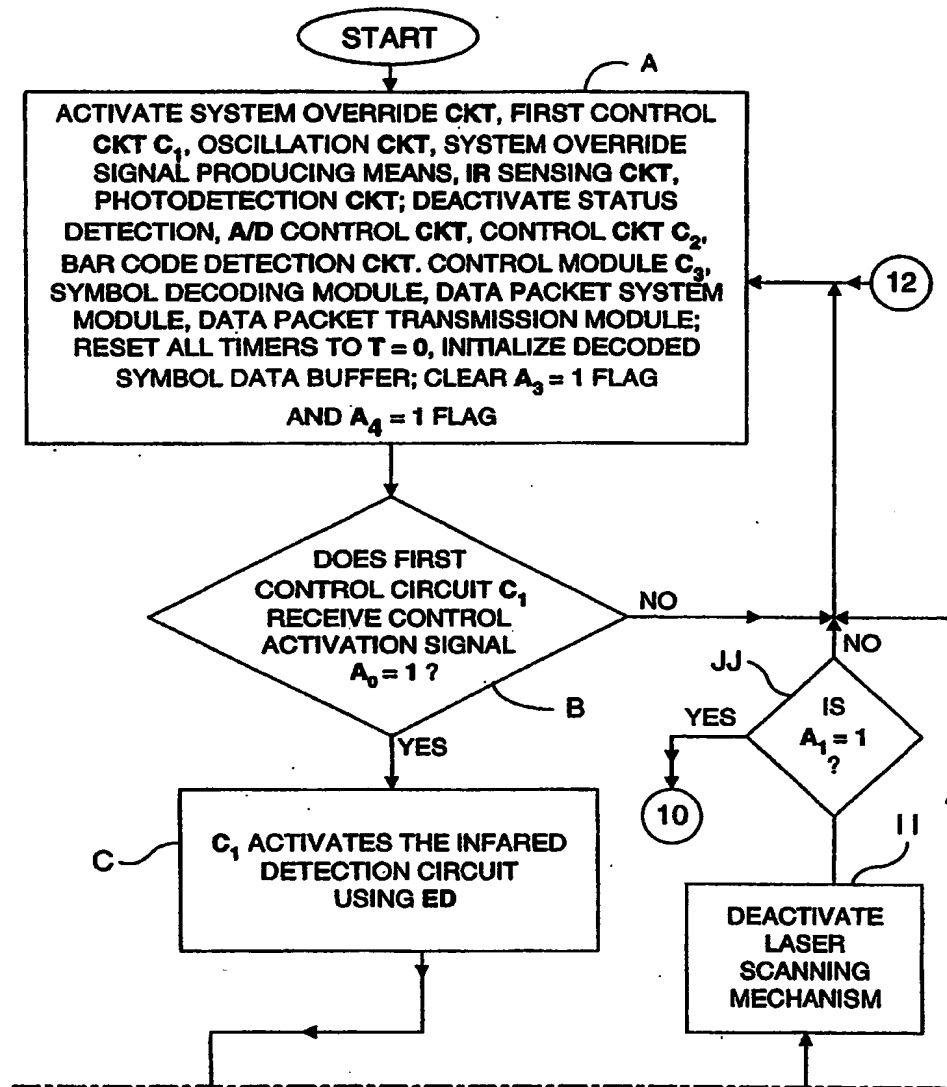
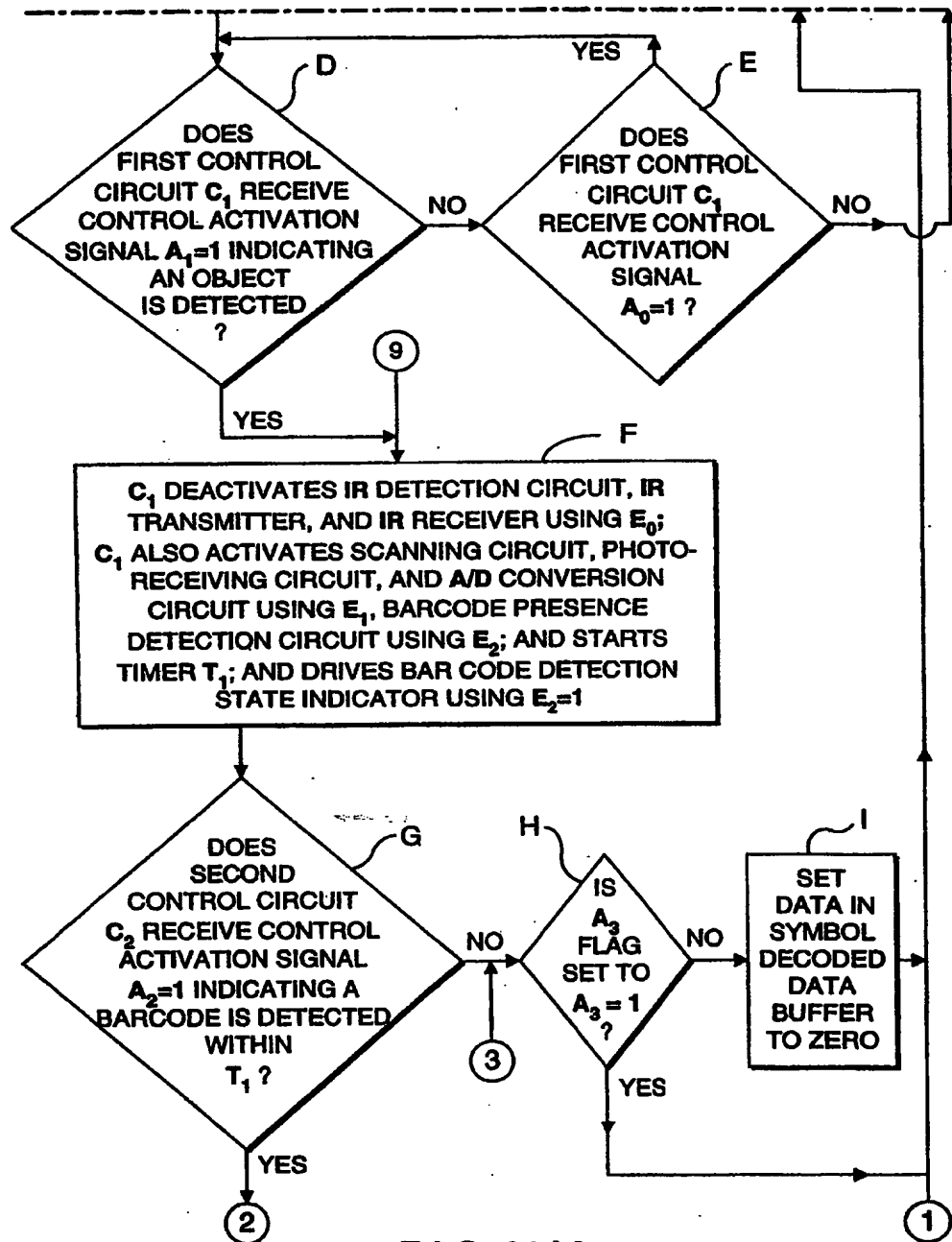


FIG. 30A1



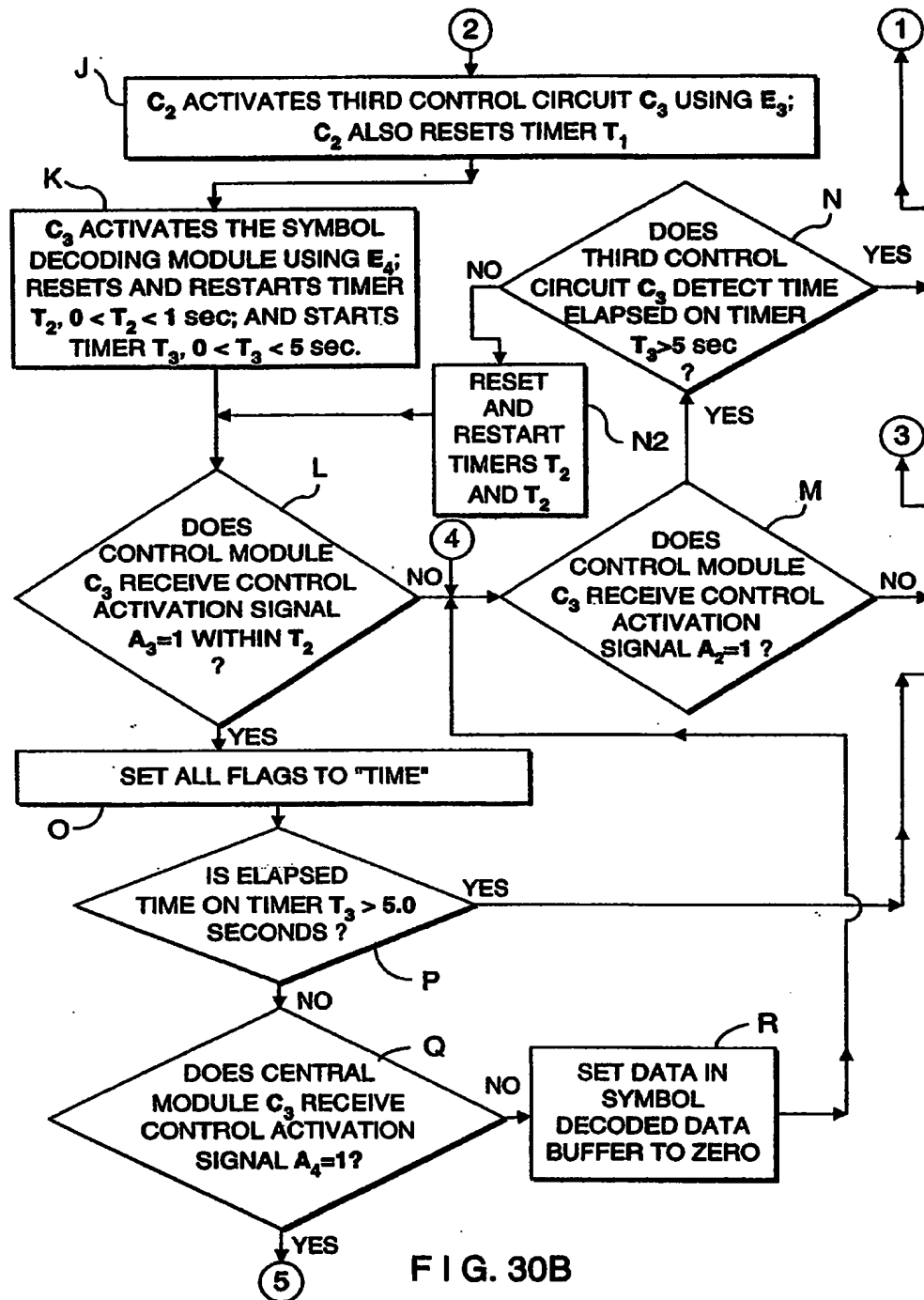


FIG. 30B

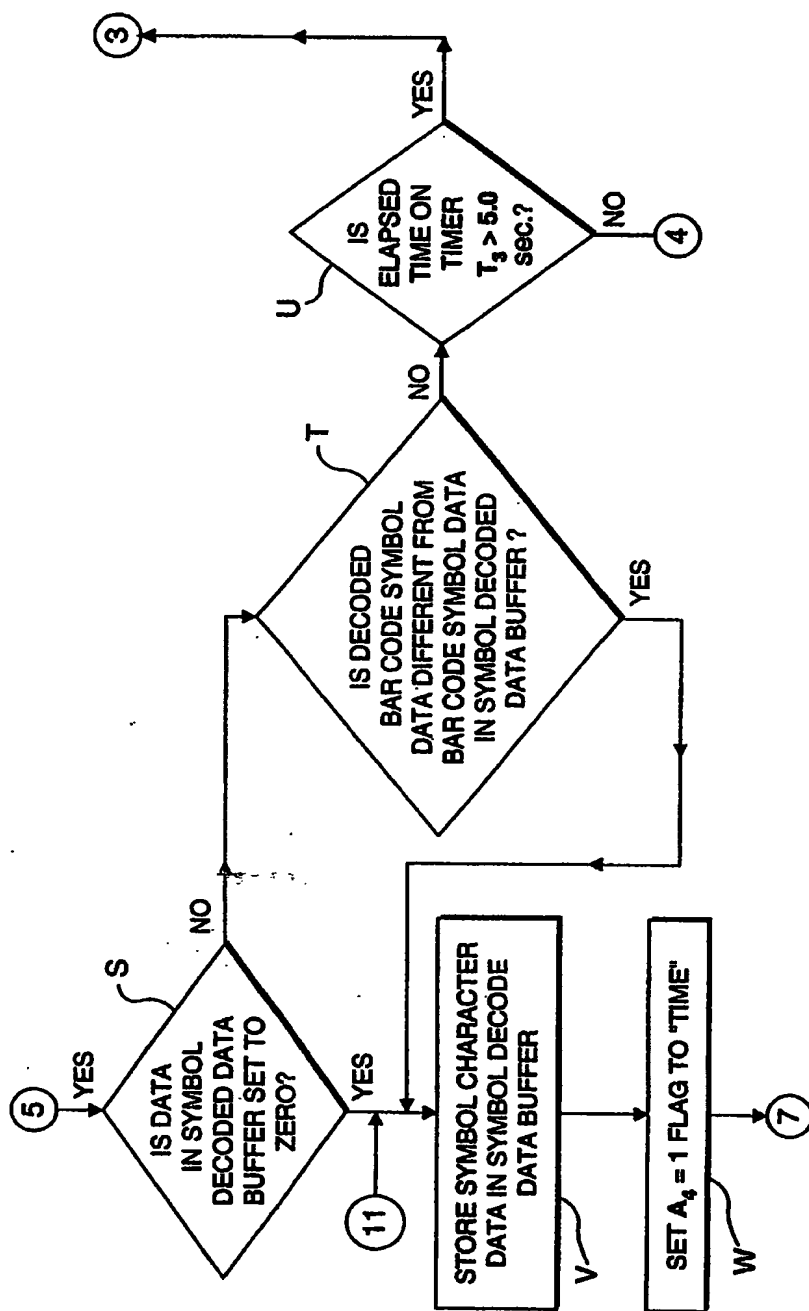


FIG. 30C



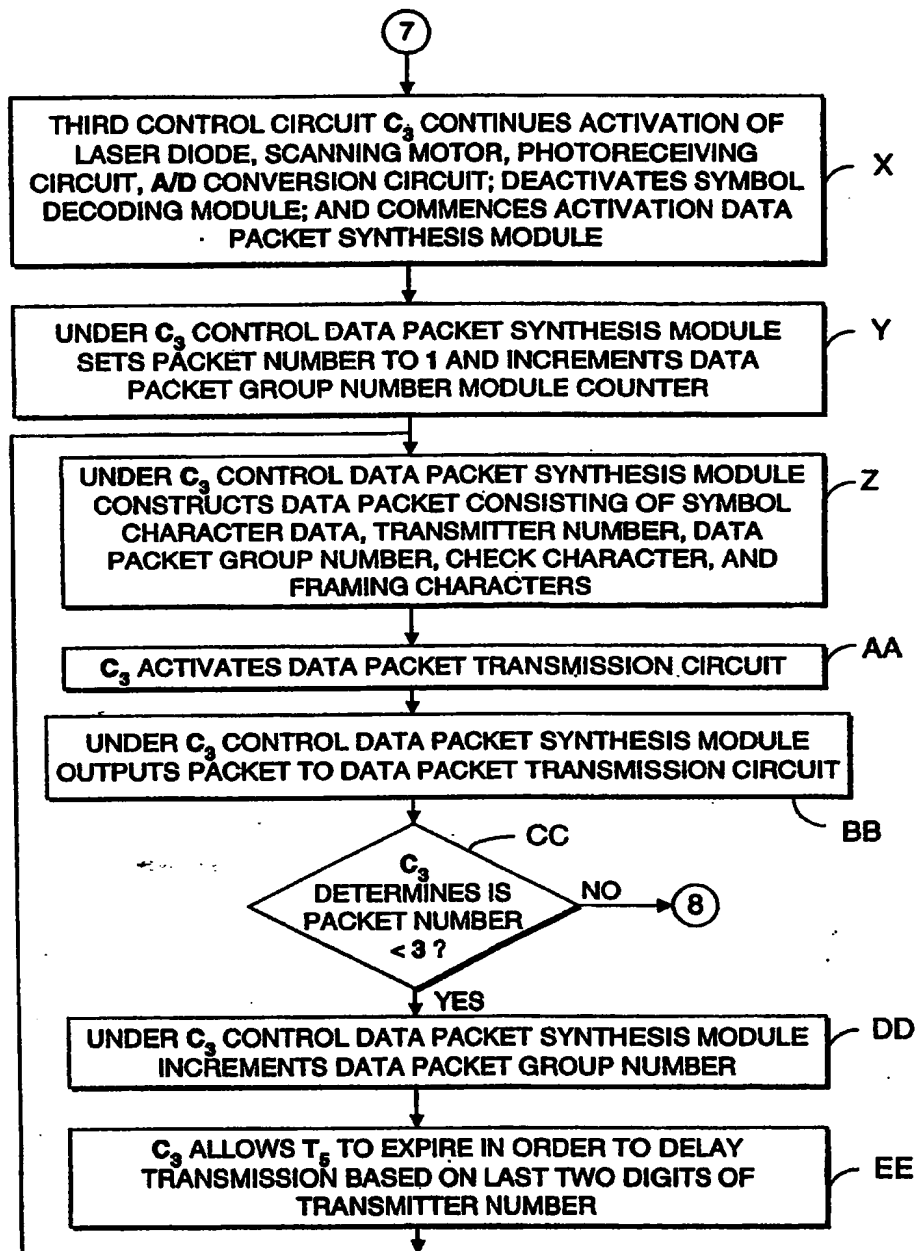
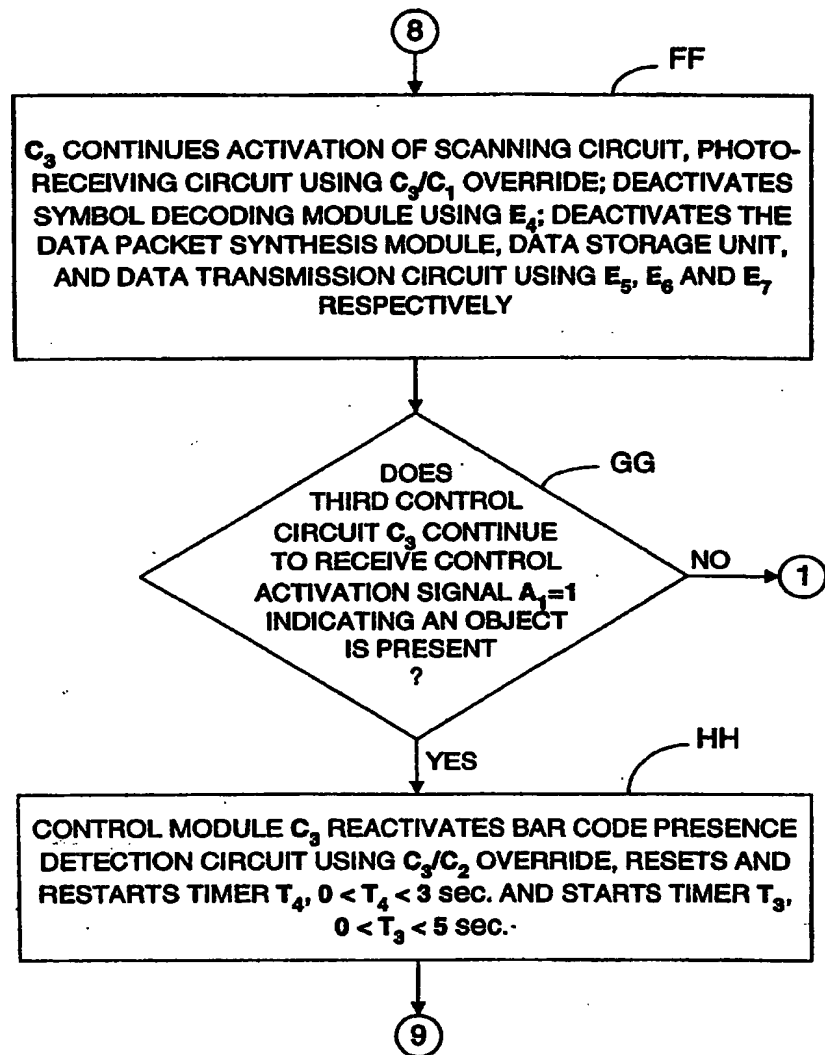


FIG. 30D



**FIG. 30E**

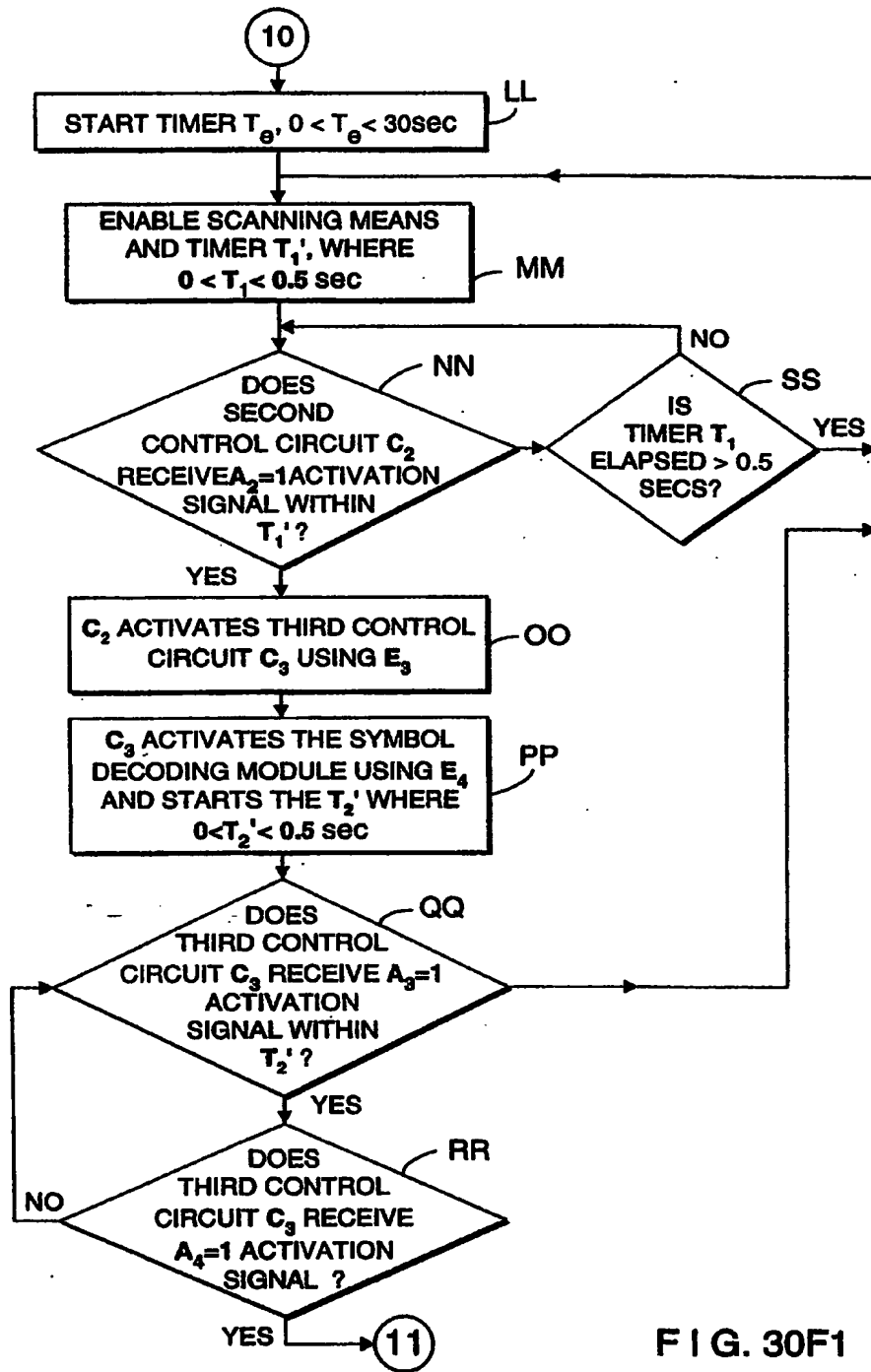
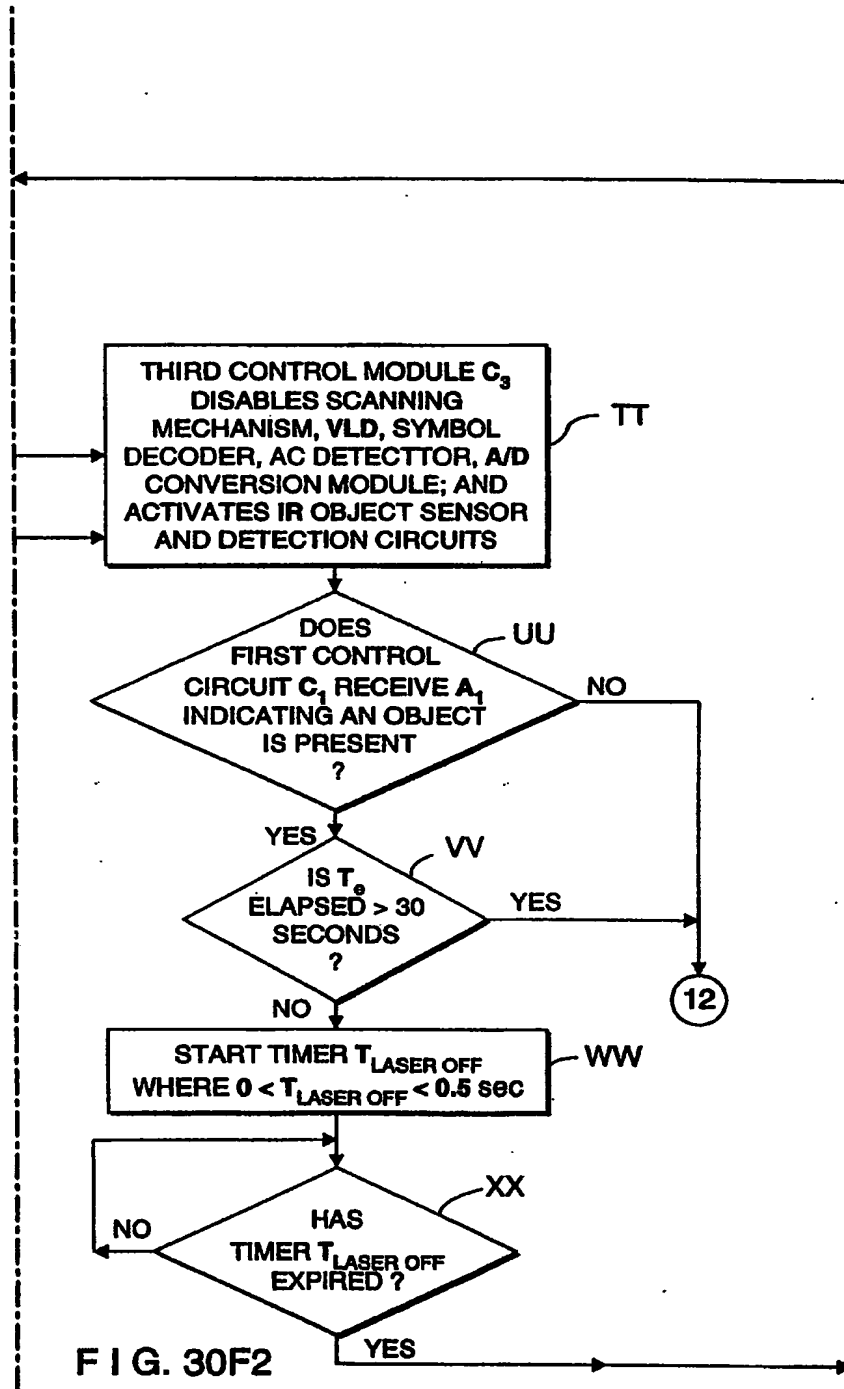


FIG. 30F1



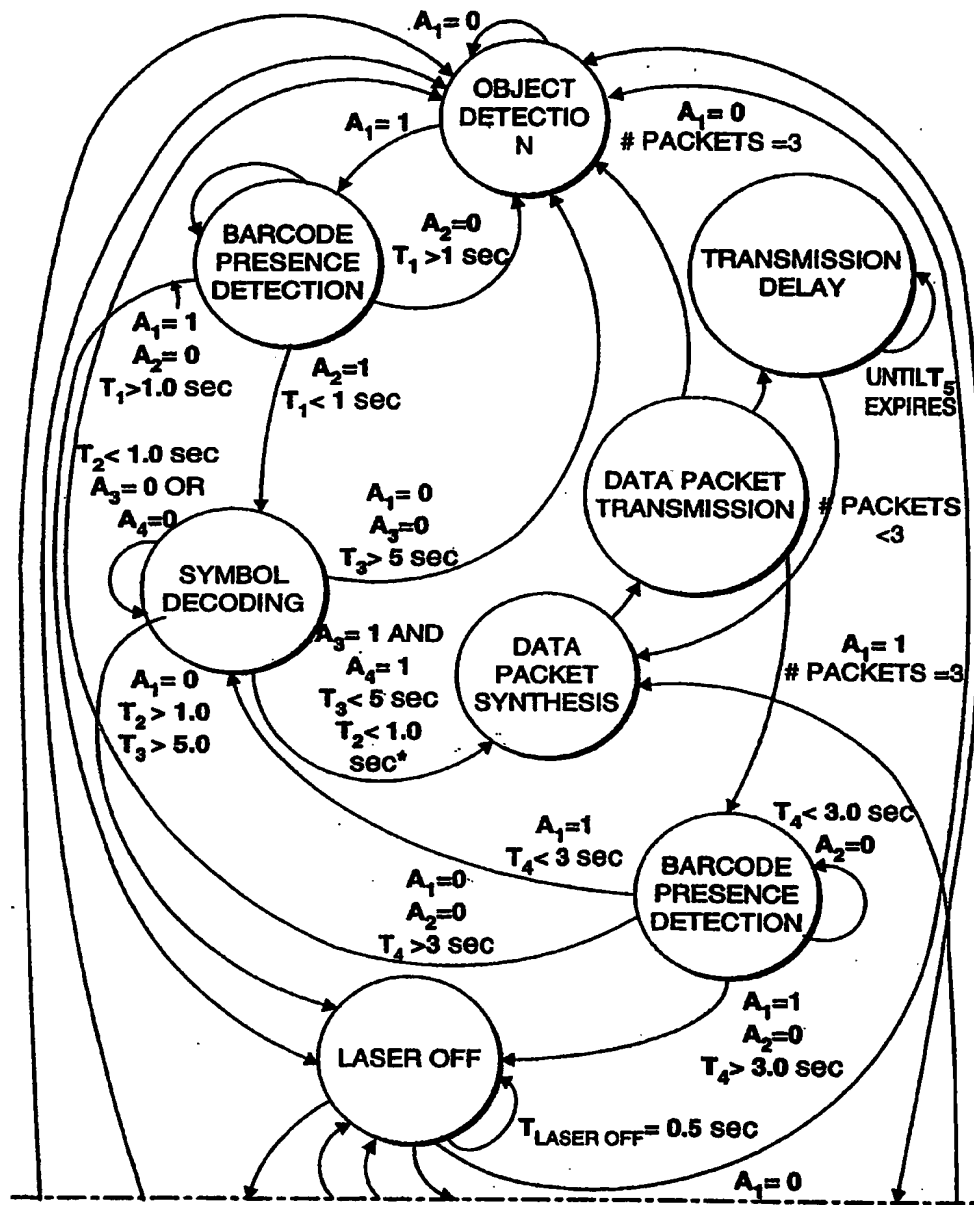
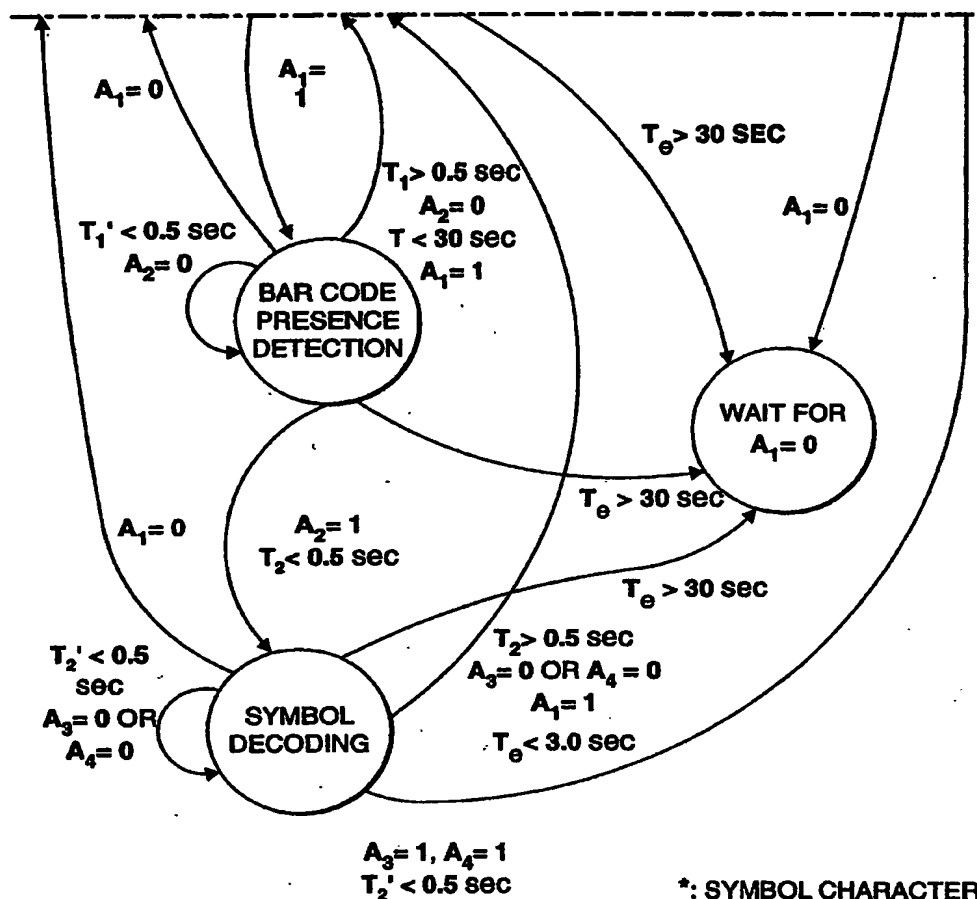


FIG. 31A



\*: SYMBOL CHARACTER DATA IS DIFFERENT THAN DATA ELEMENT IN DECODED SYMBOL DATA BUFFER

FIG. 31B

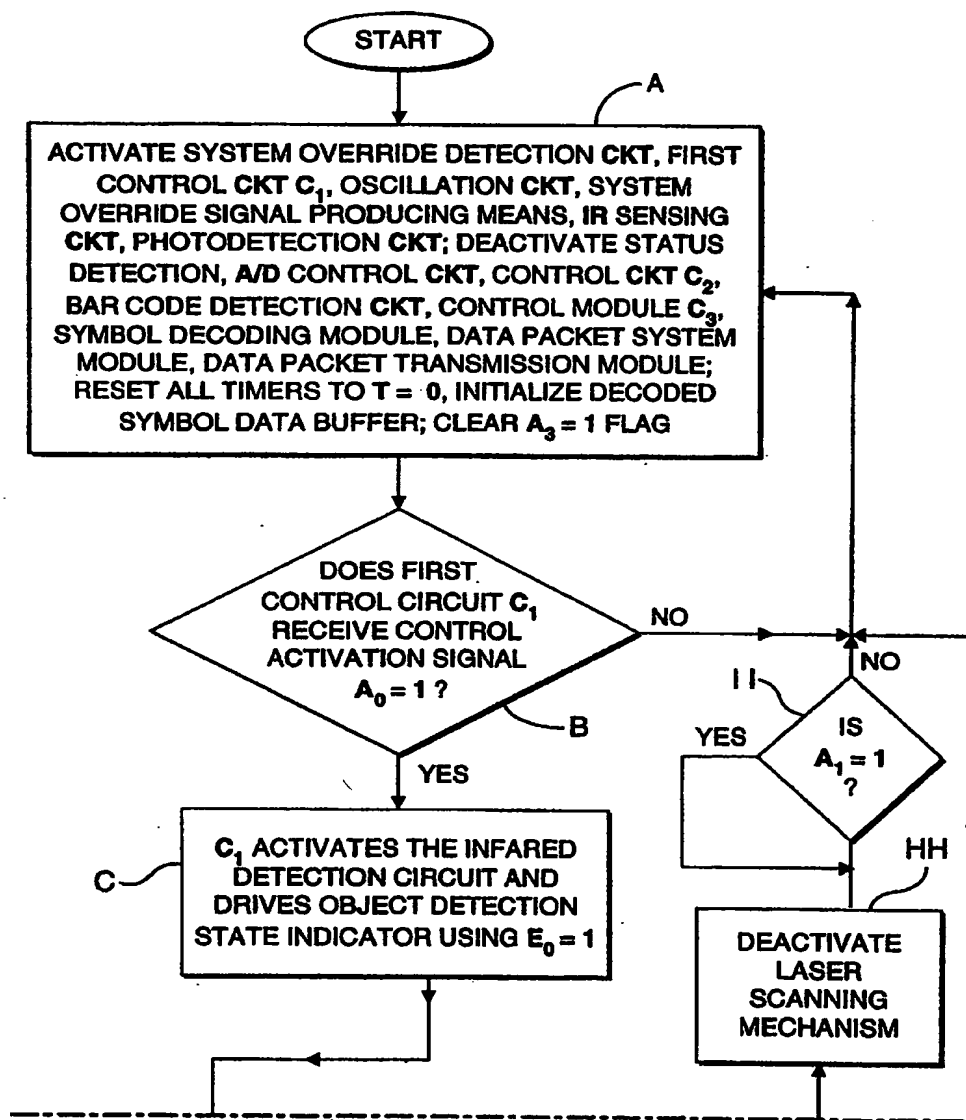


FIG. 32A1

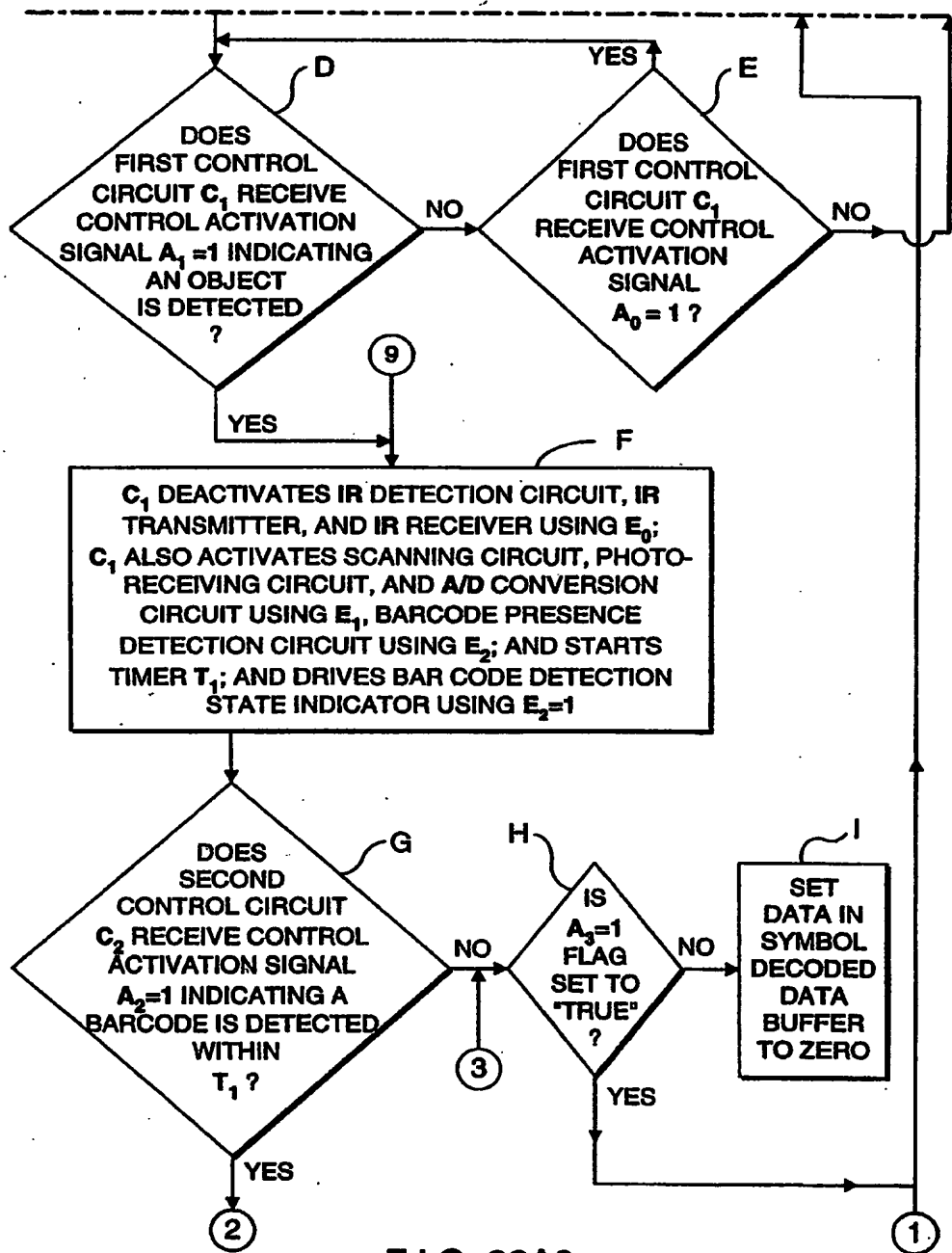


FIG. 32A2



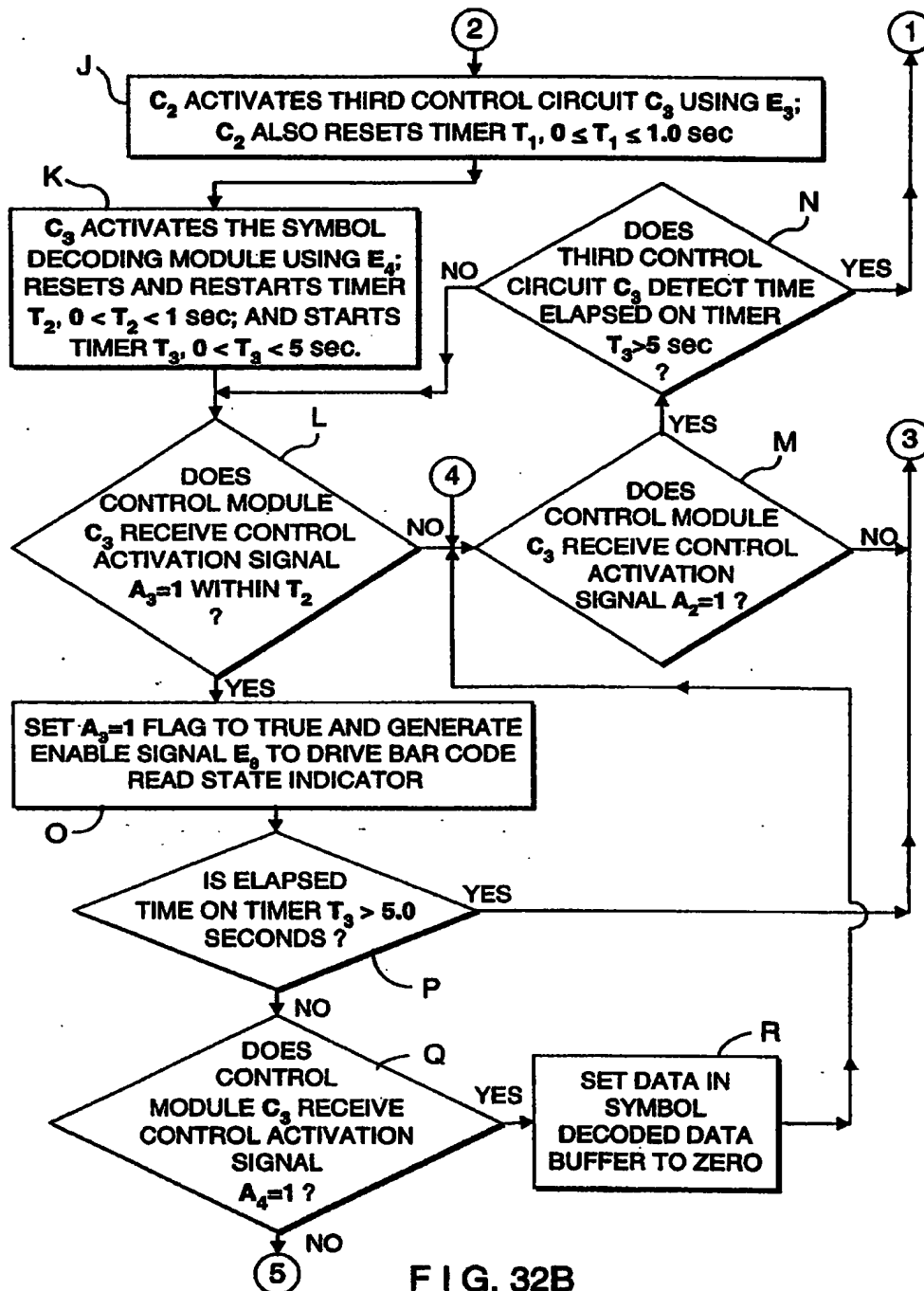


FIG. 32B

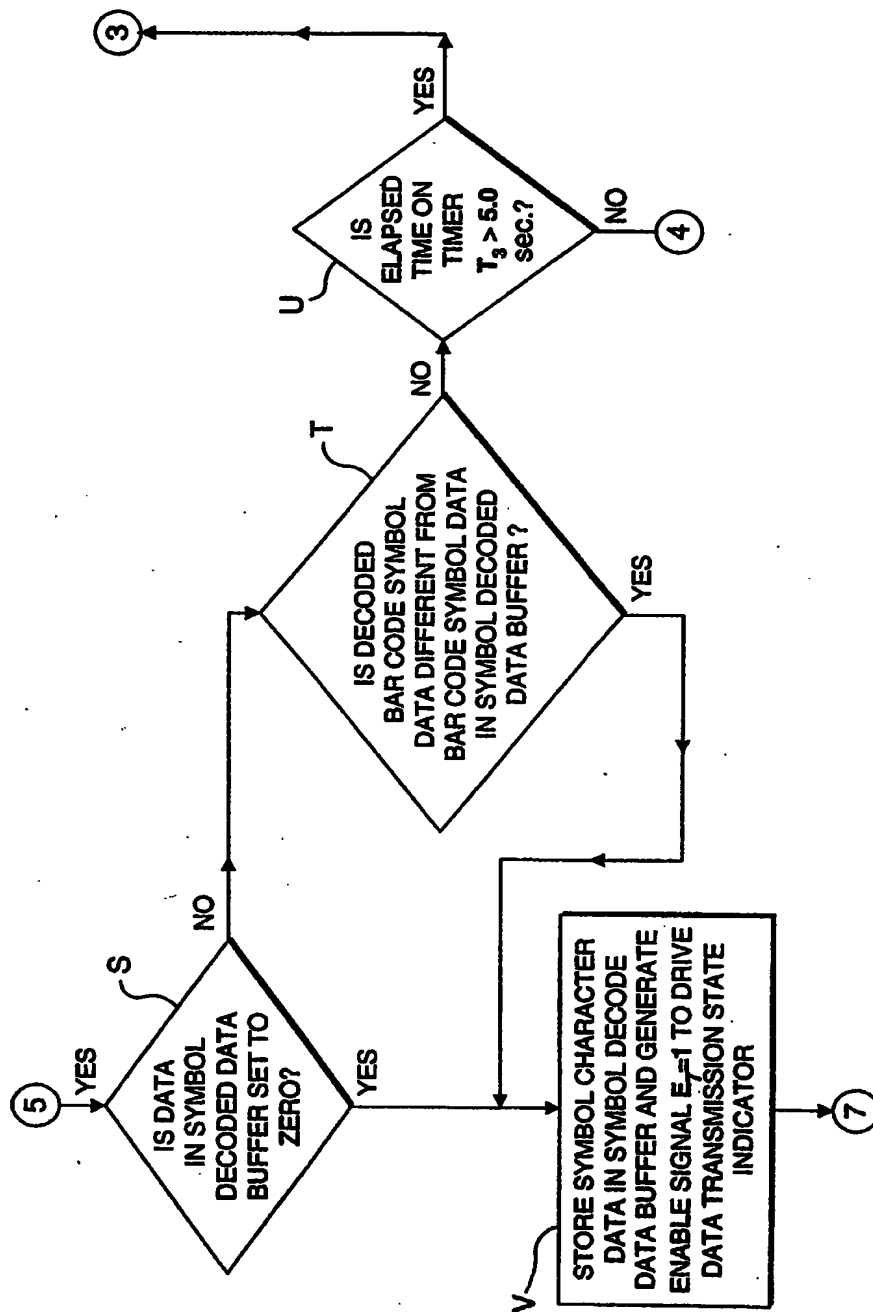


FIG. 32C

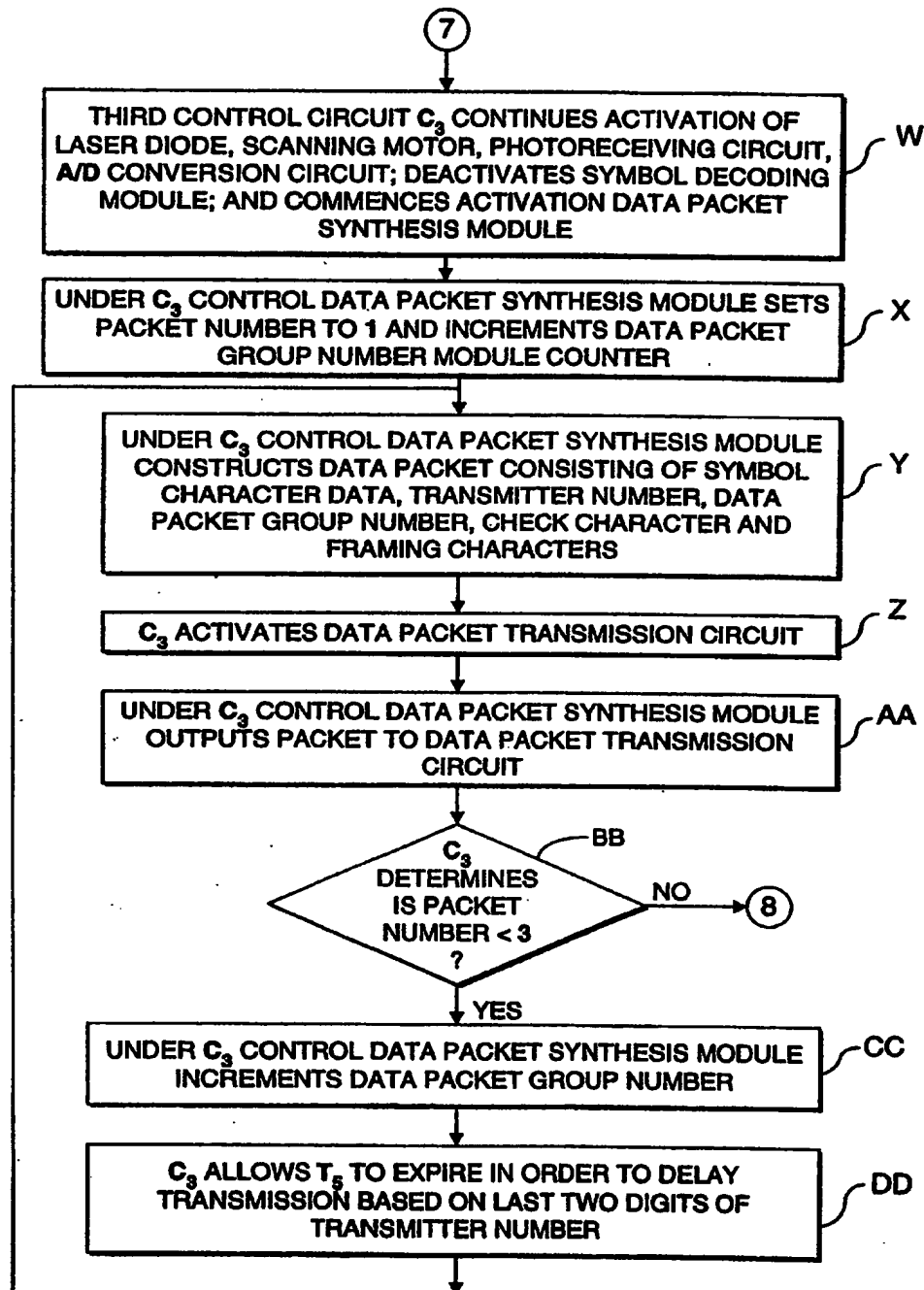
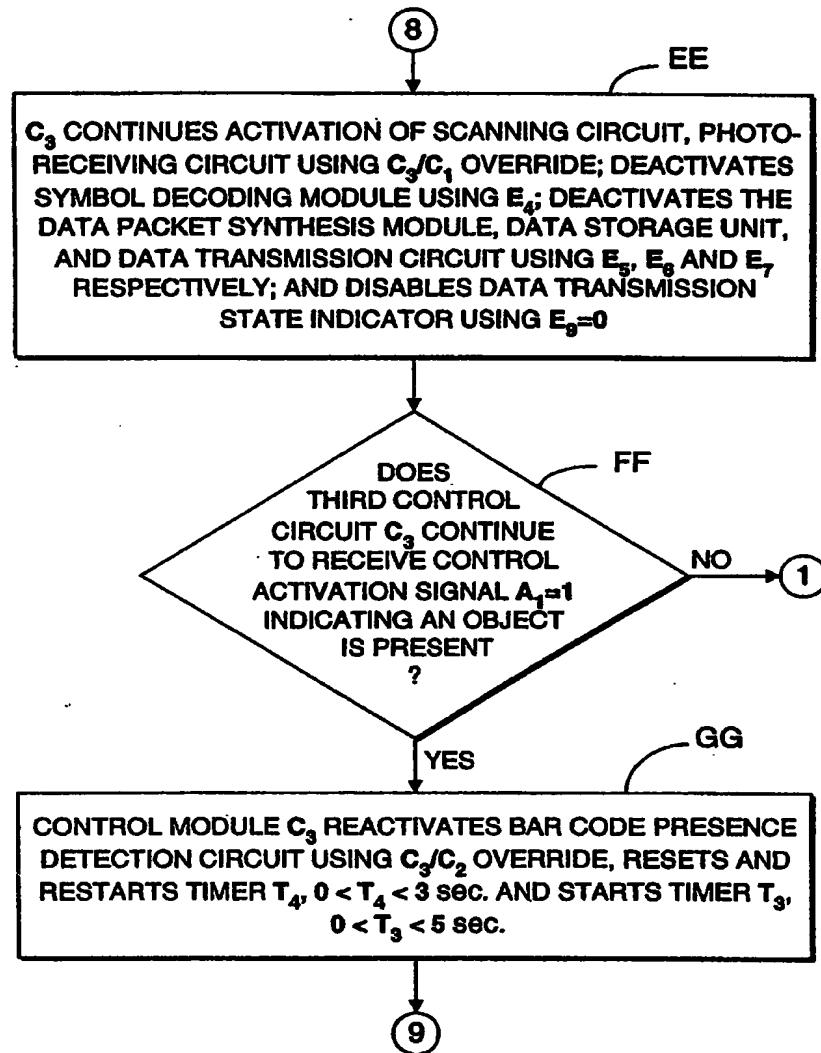


FIG. 32D



**FIG. 32E**

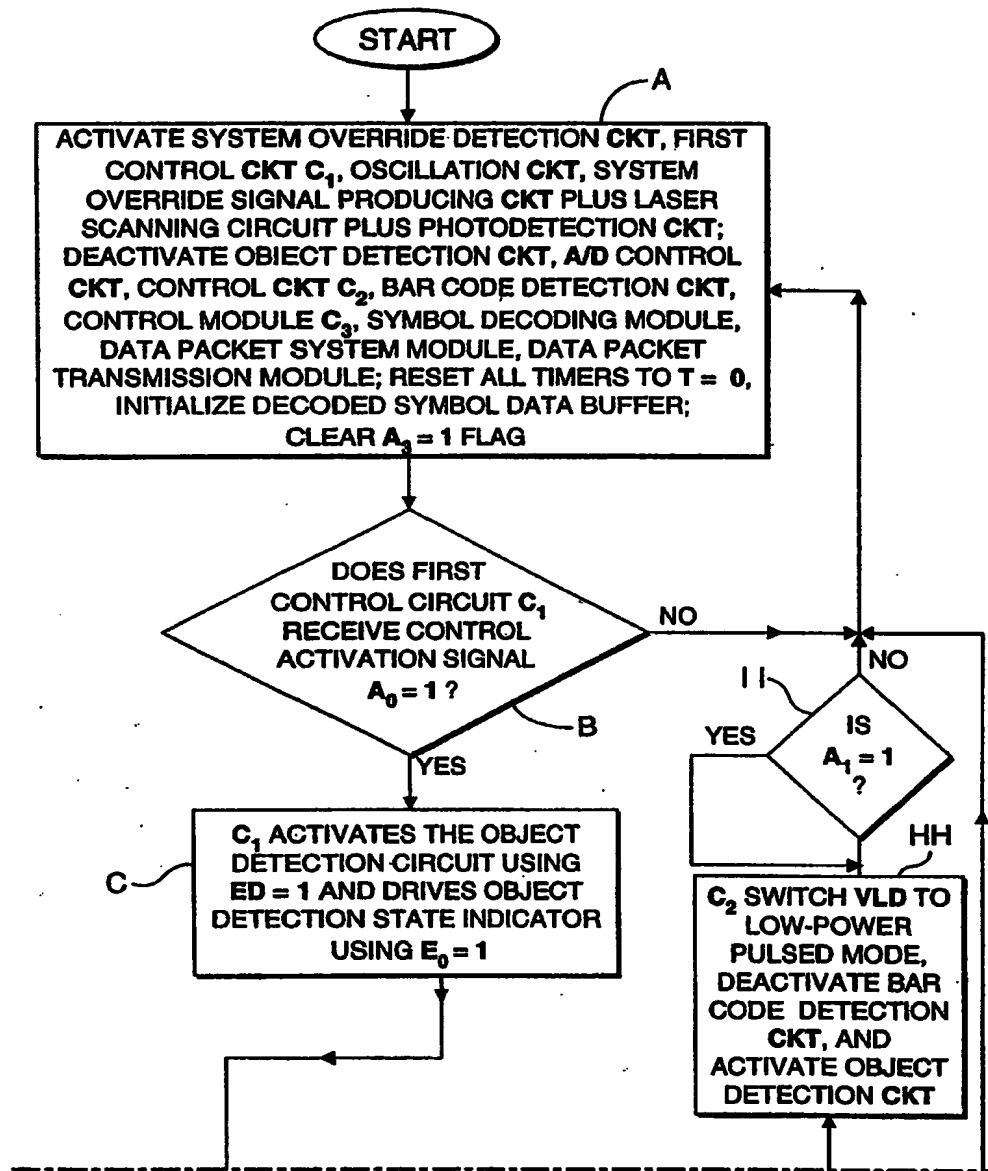
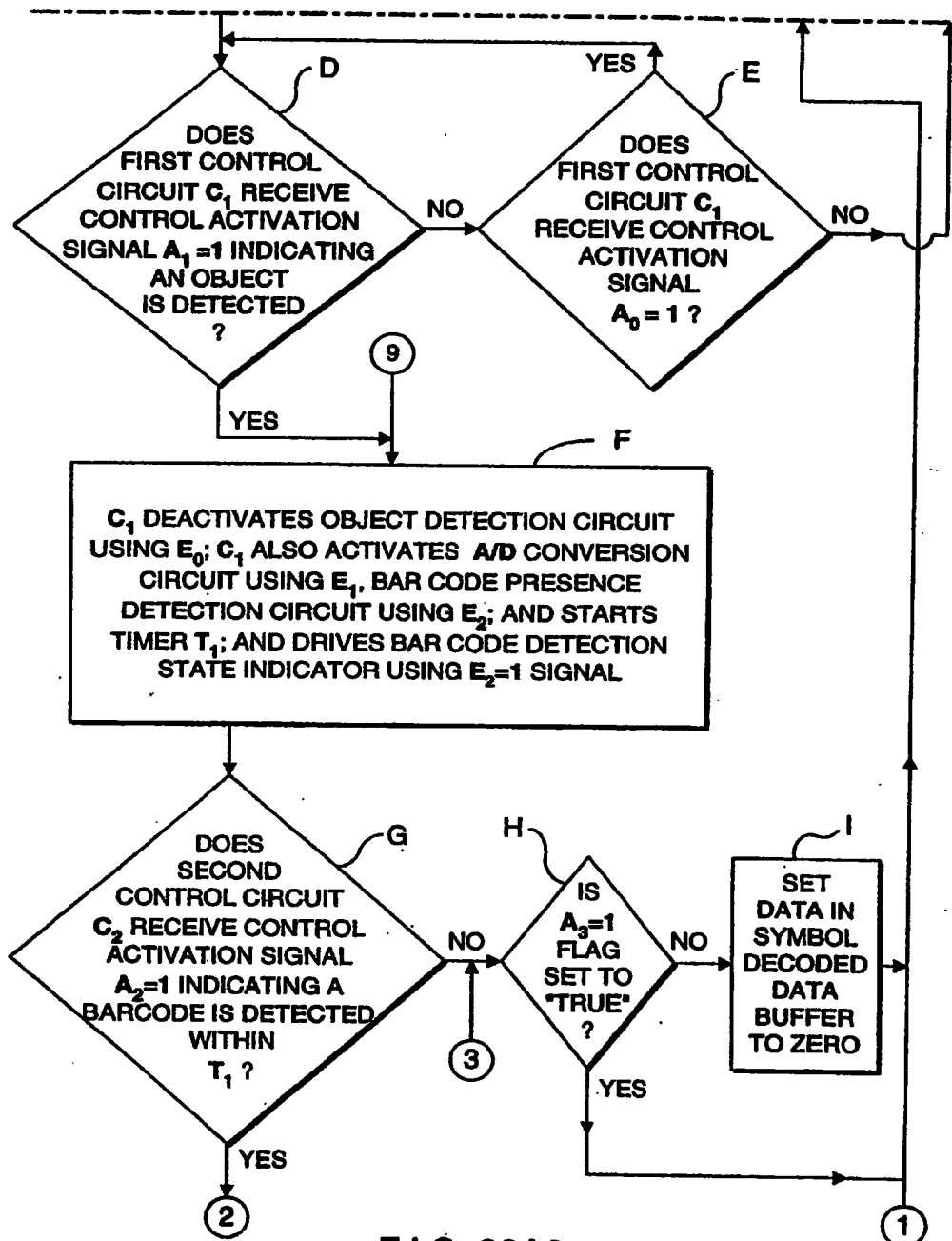


FIG. 33A1



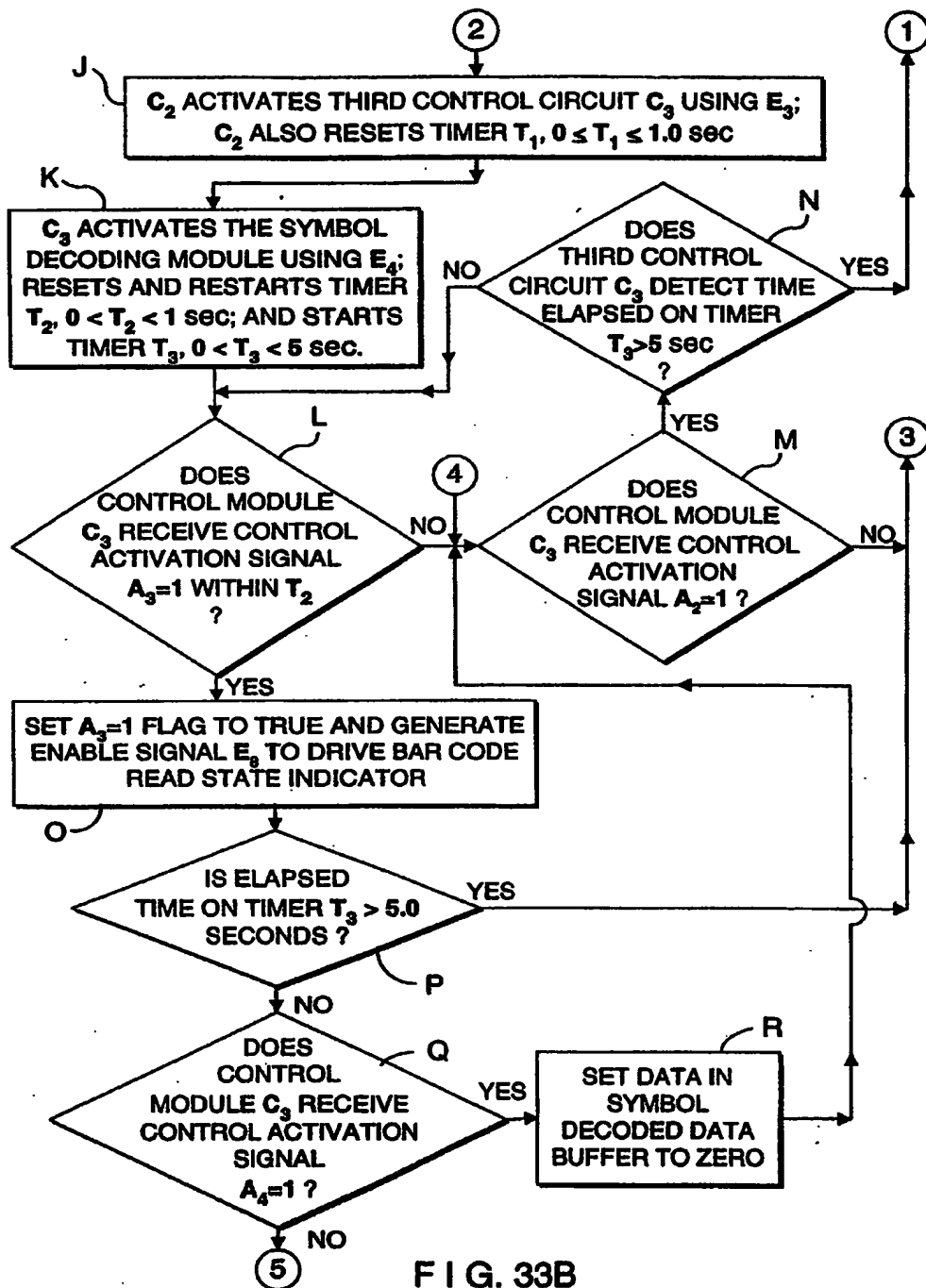


FIG. 33B

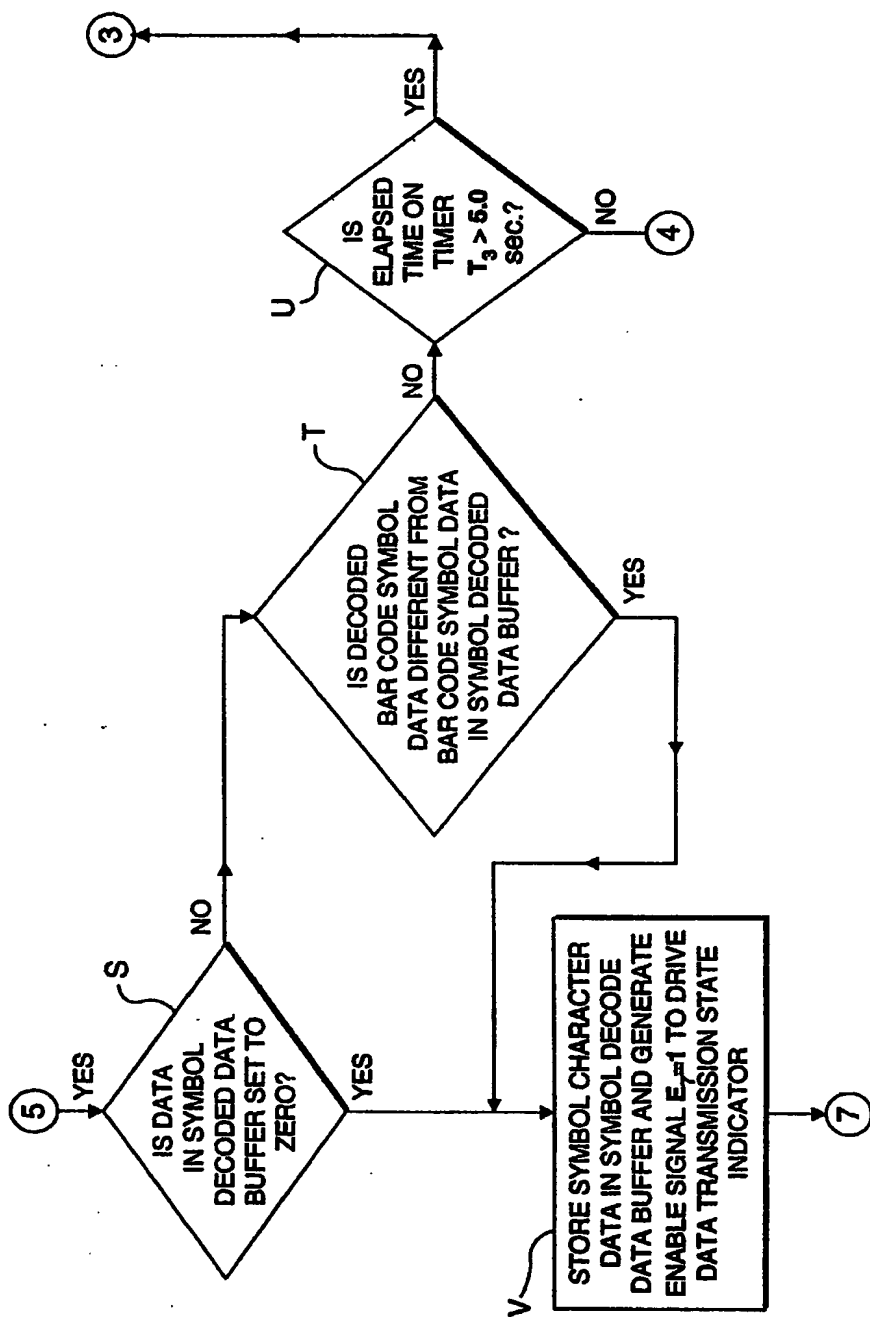


FIG. 33C



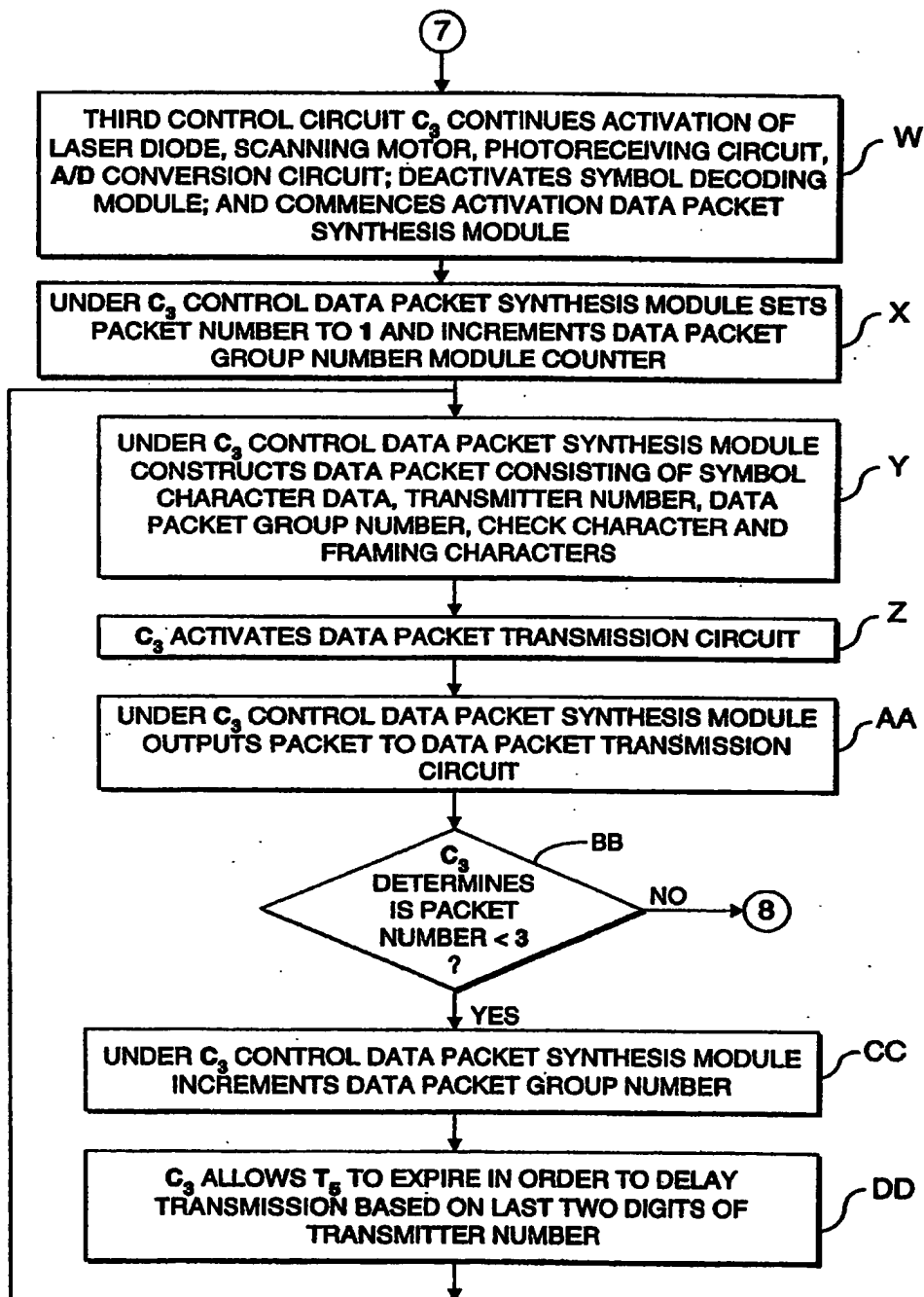
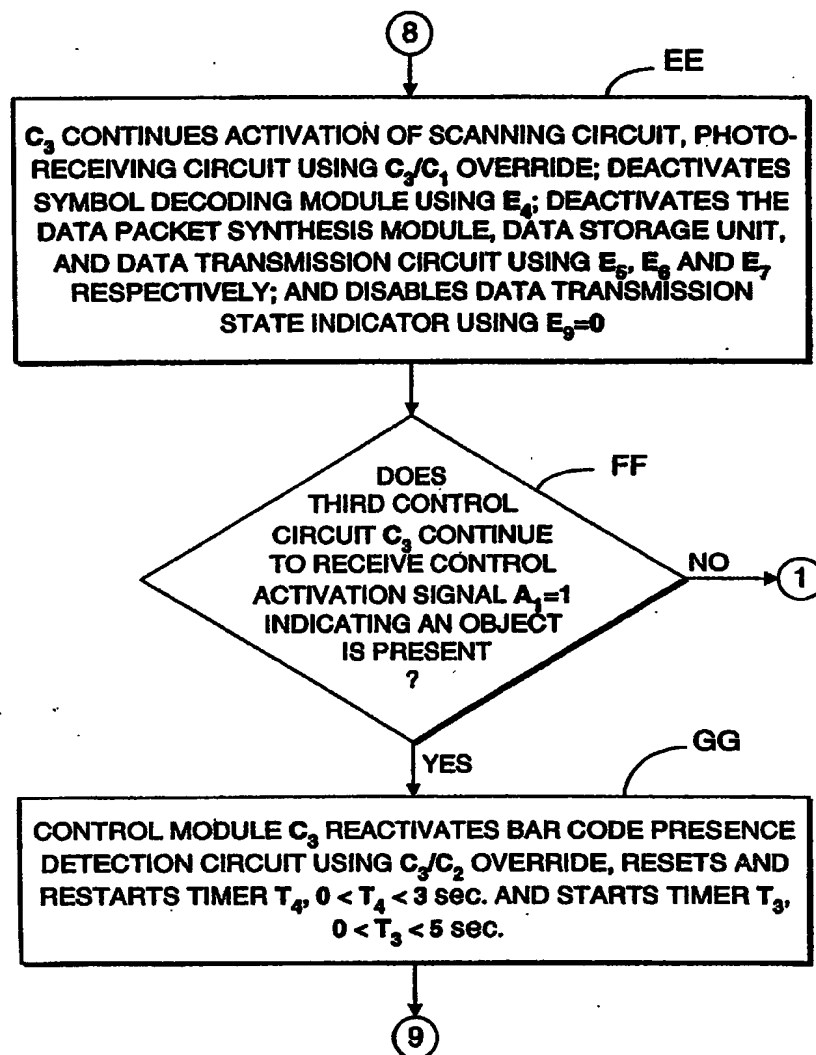


FIG. 33D



**FIG. 33E**

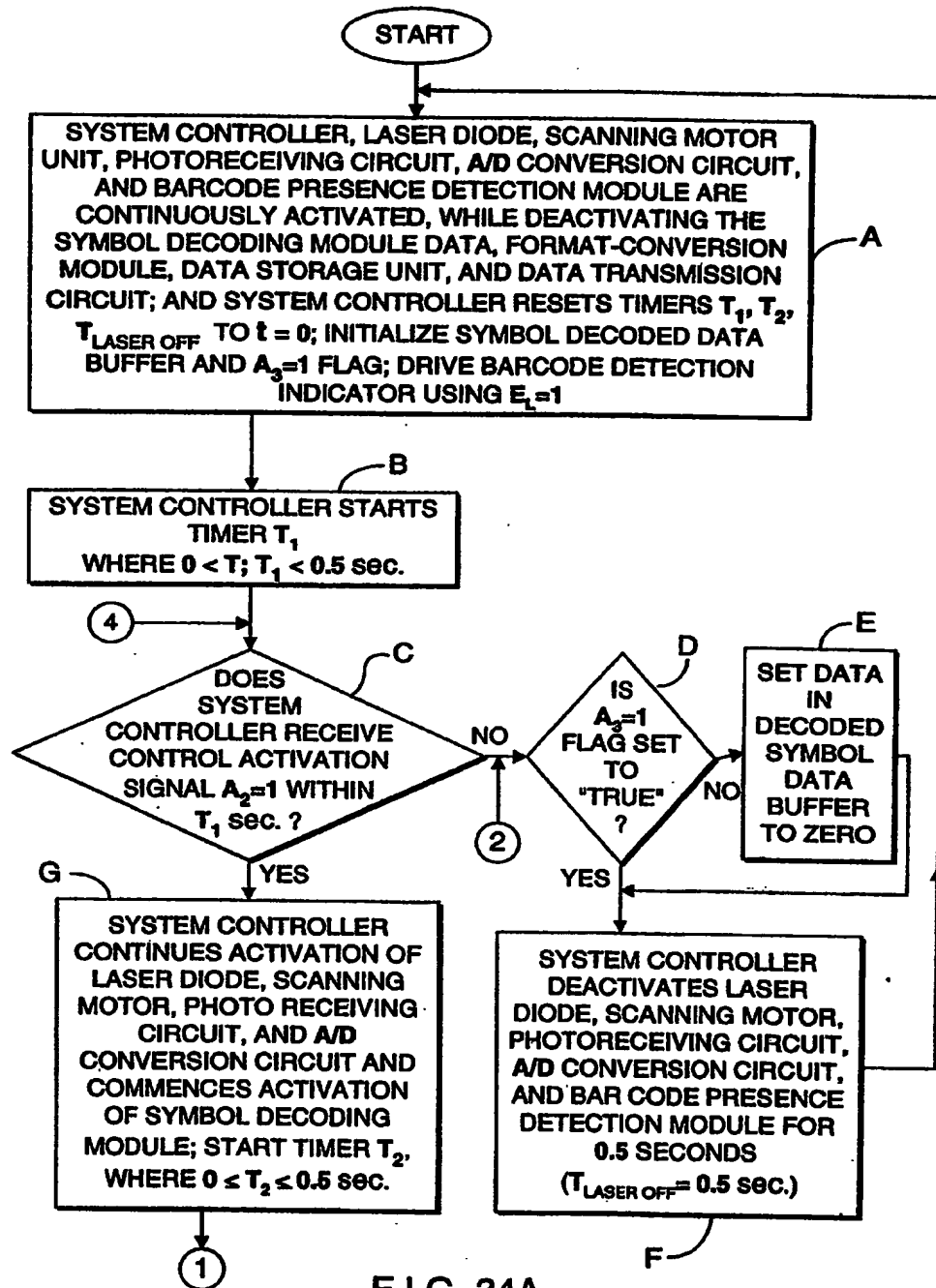


FIG. 34A

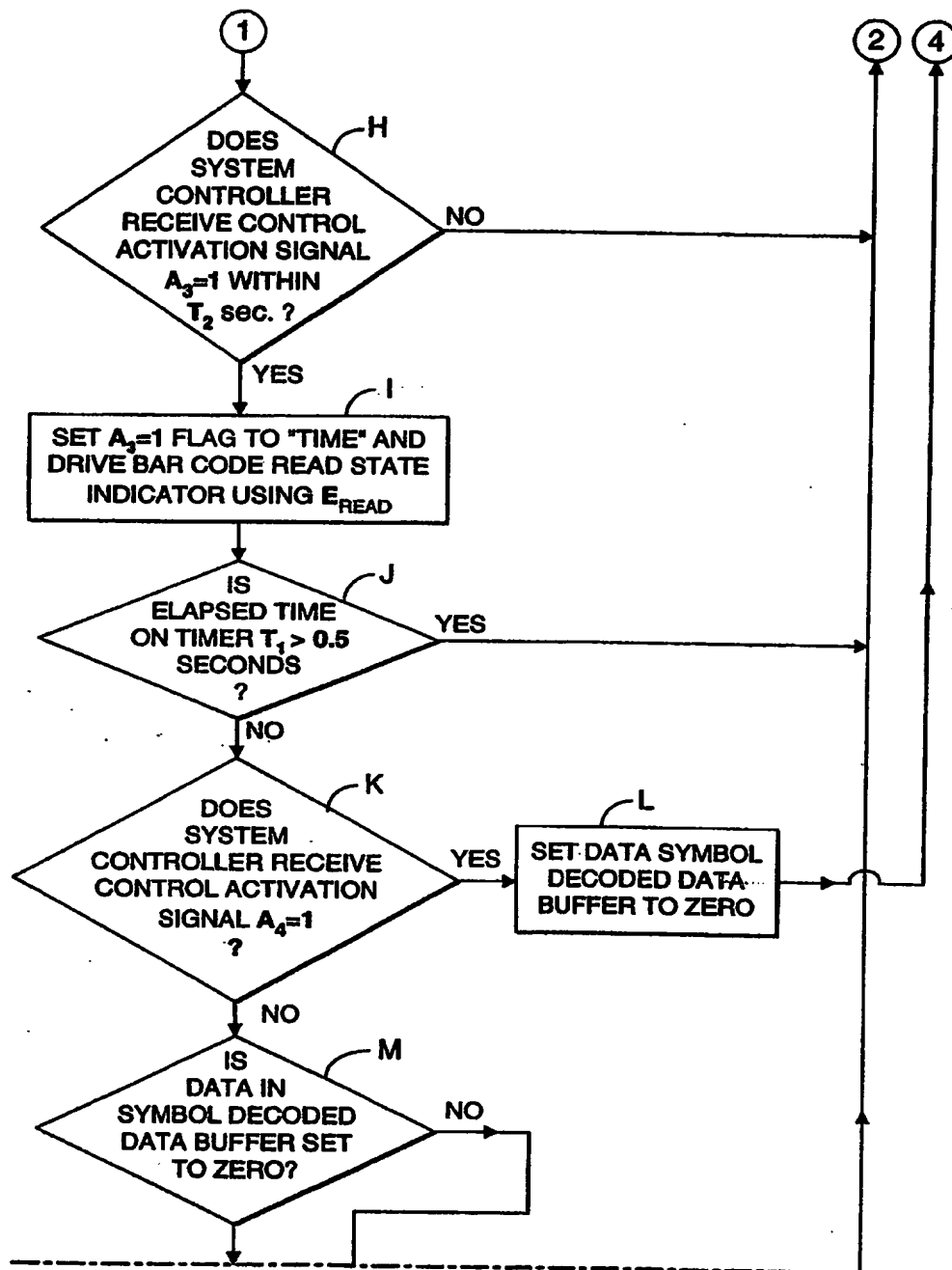


FIG. 34B1

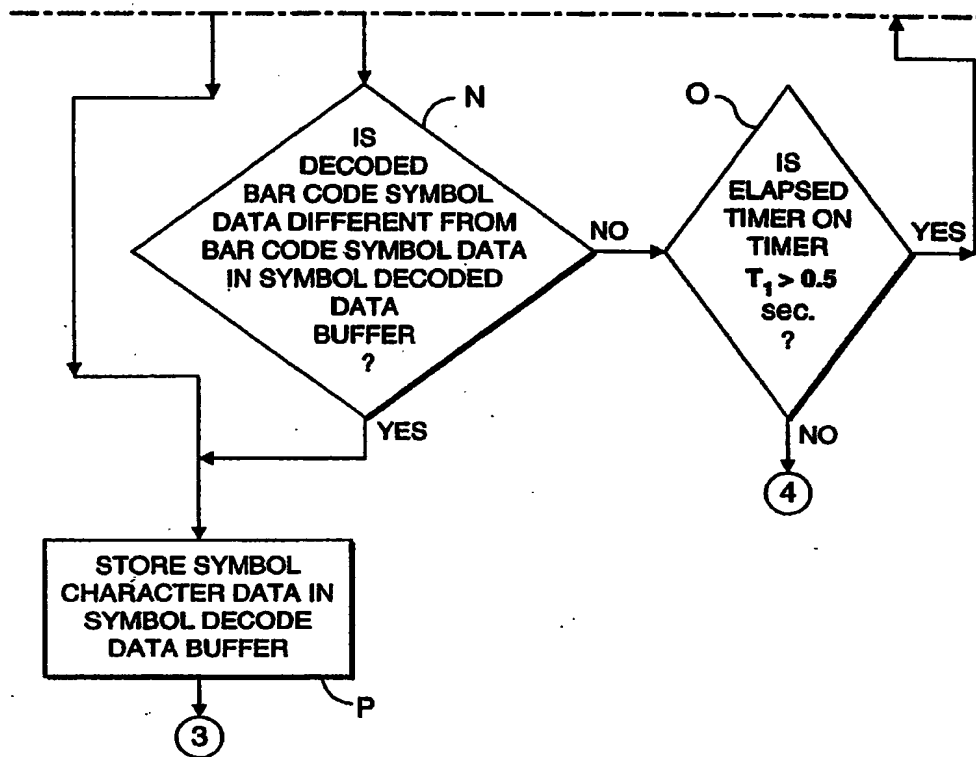


FIG. 34B2

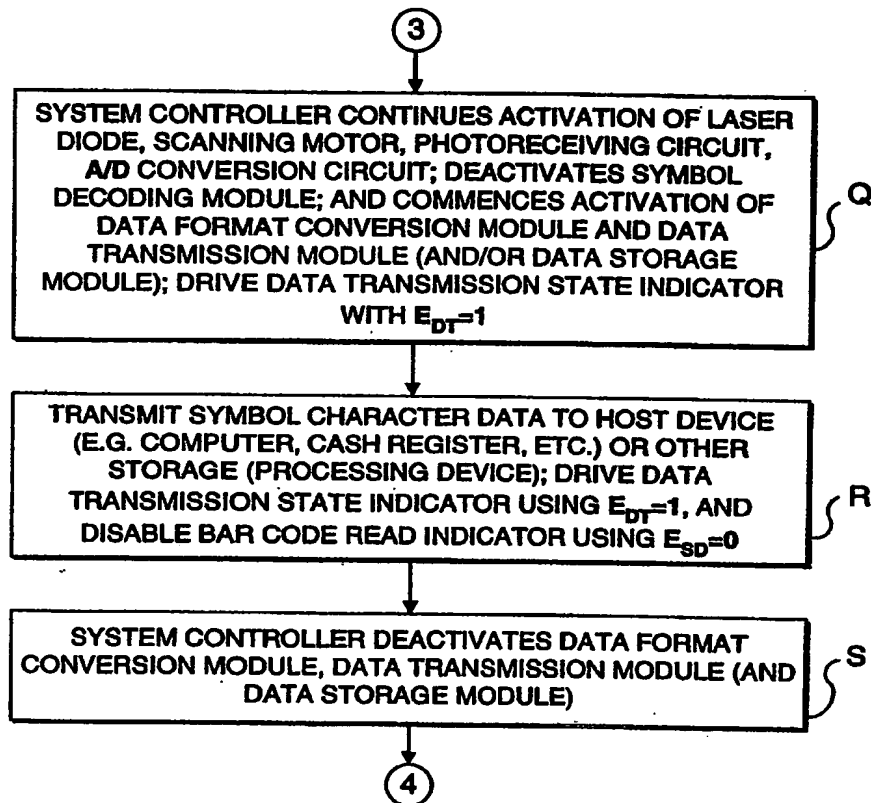


FIG. 34C

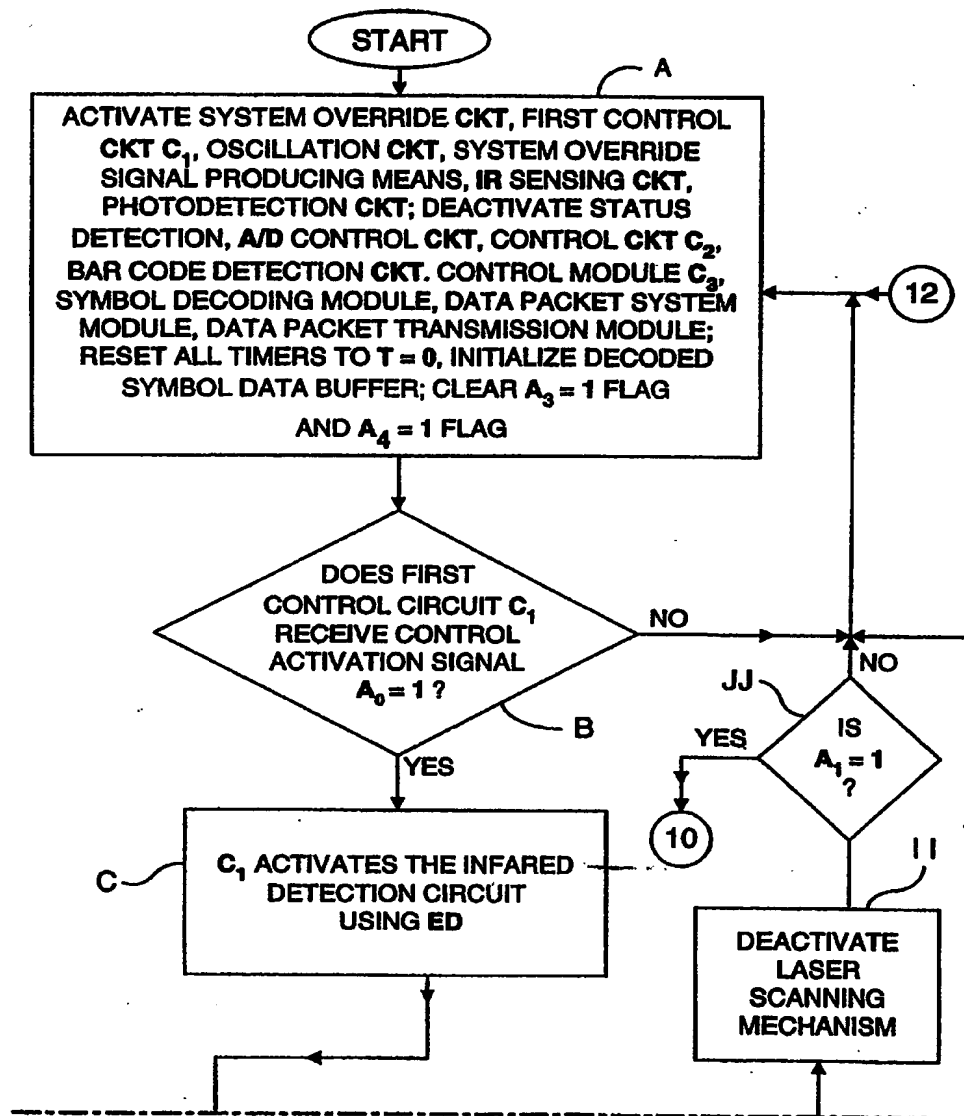
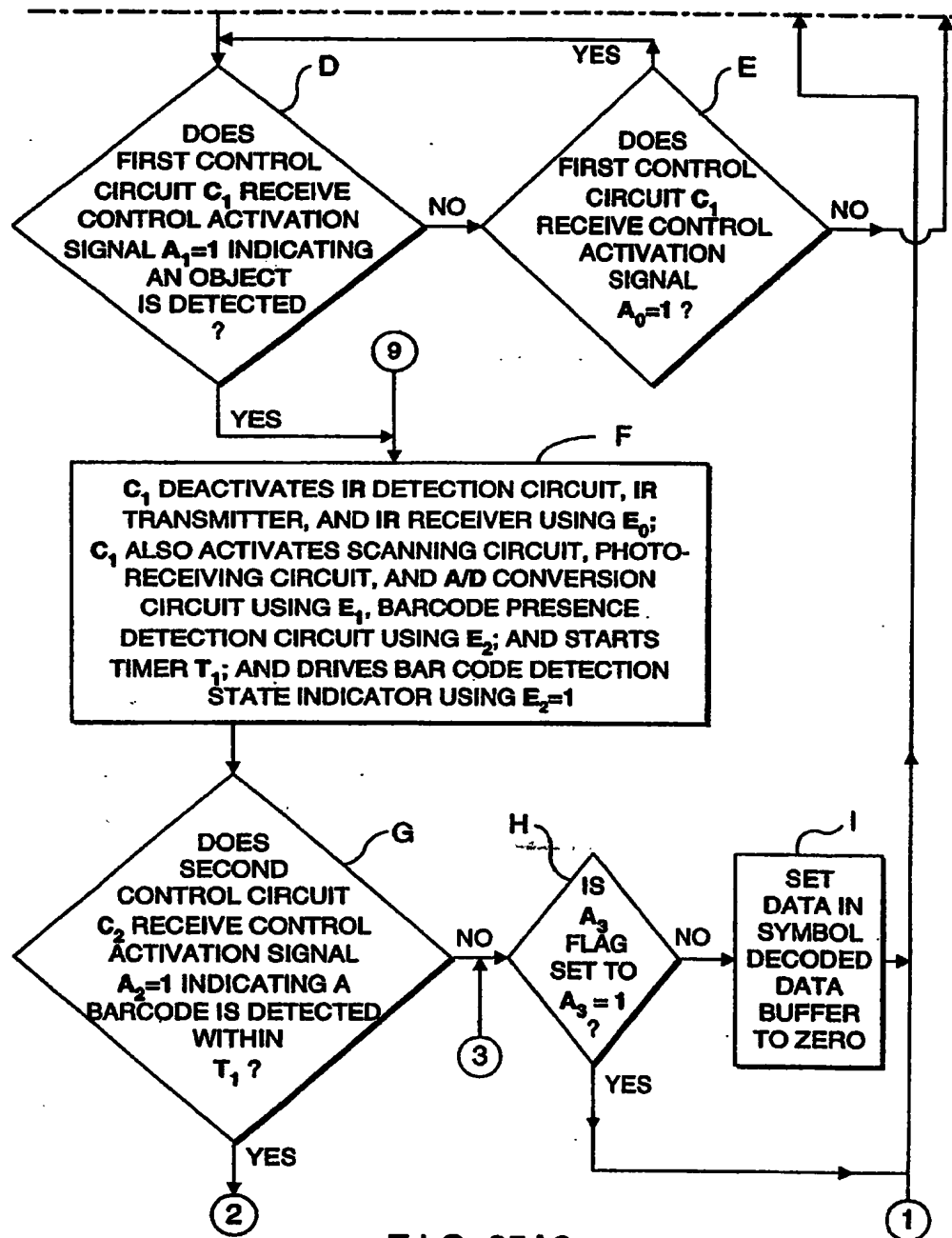


FIG. 35A1





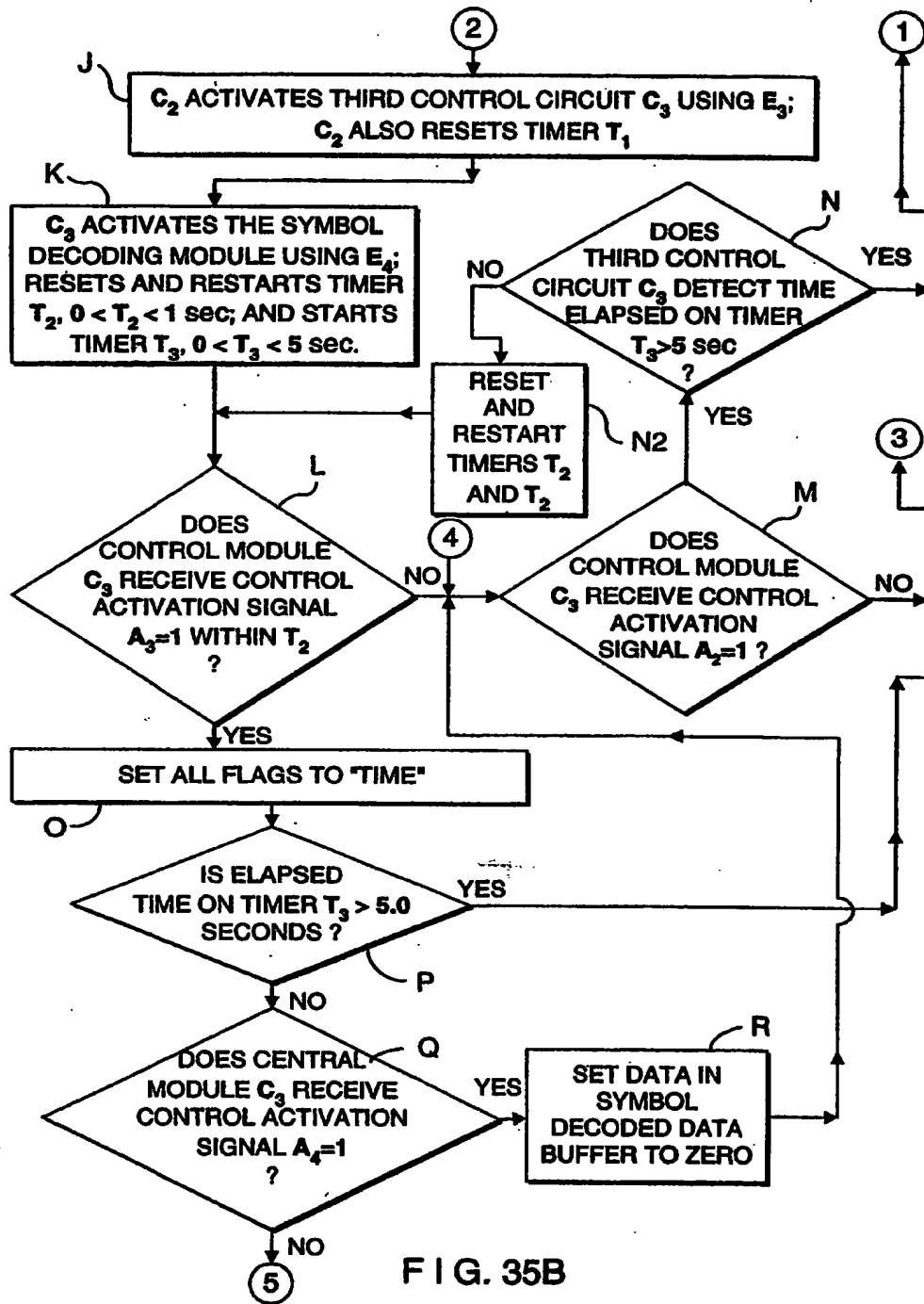


FIG. 35B

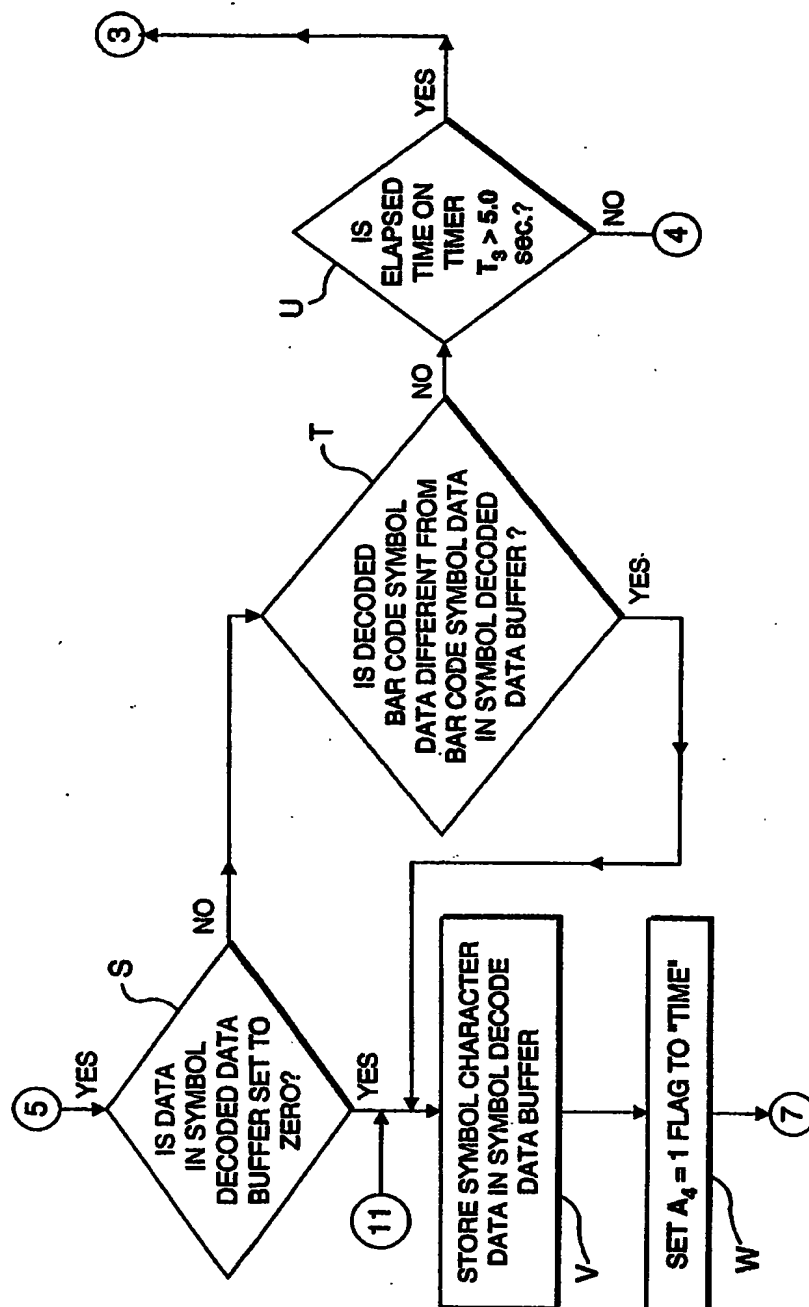


FIG. 35C

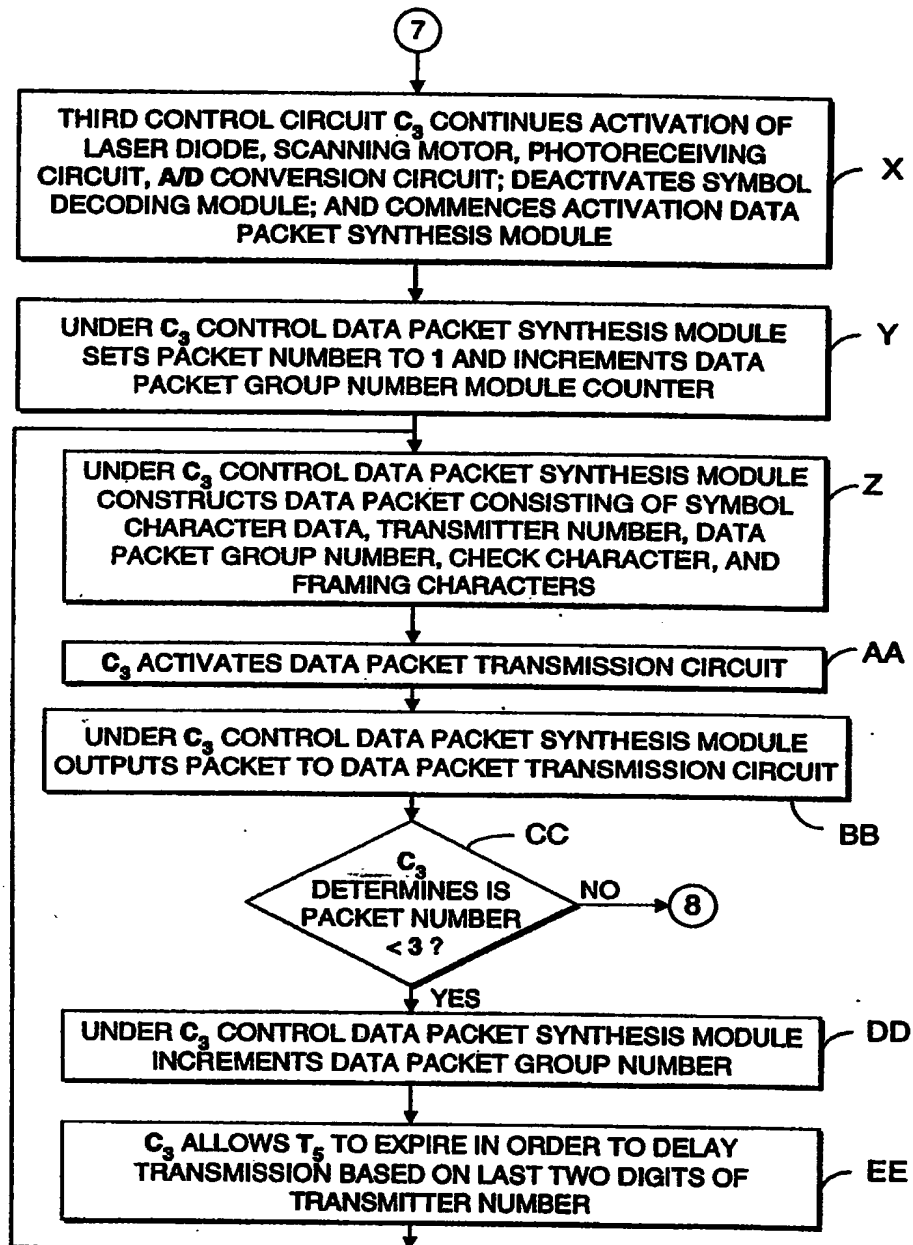
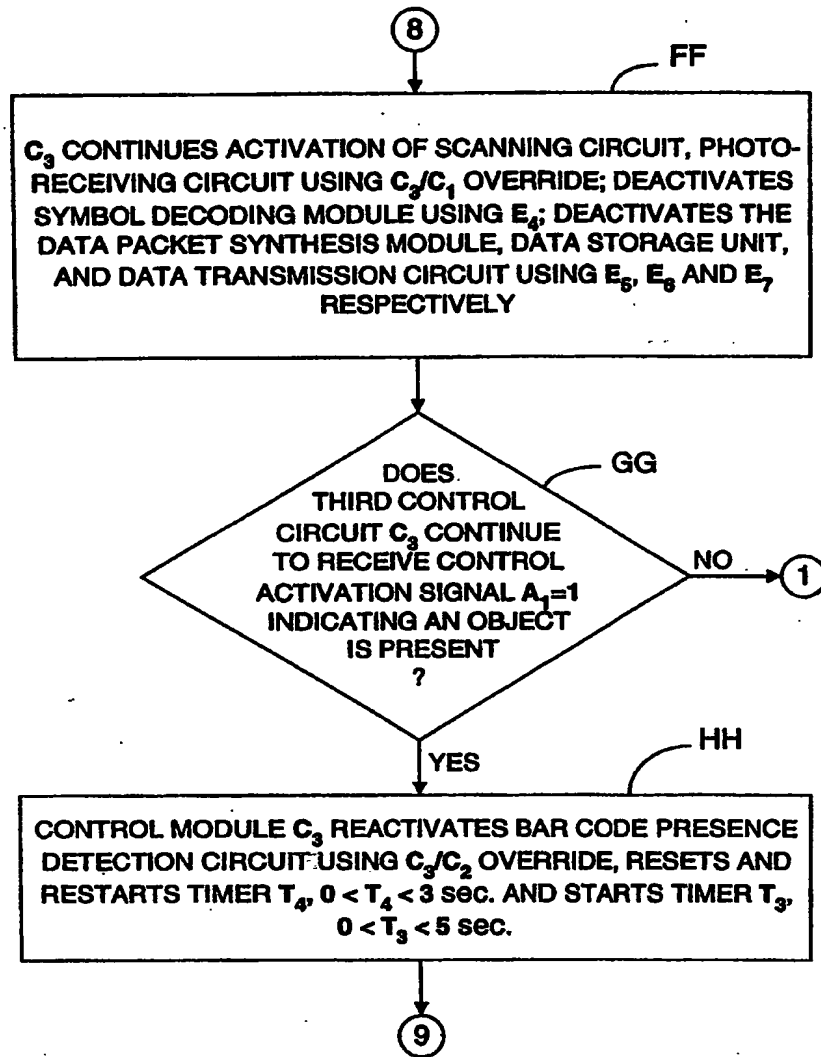


FIG. 35D



**FIG. 35E**

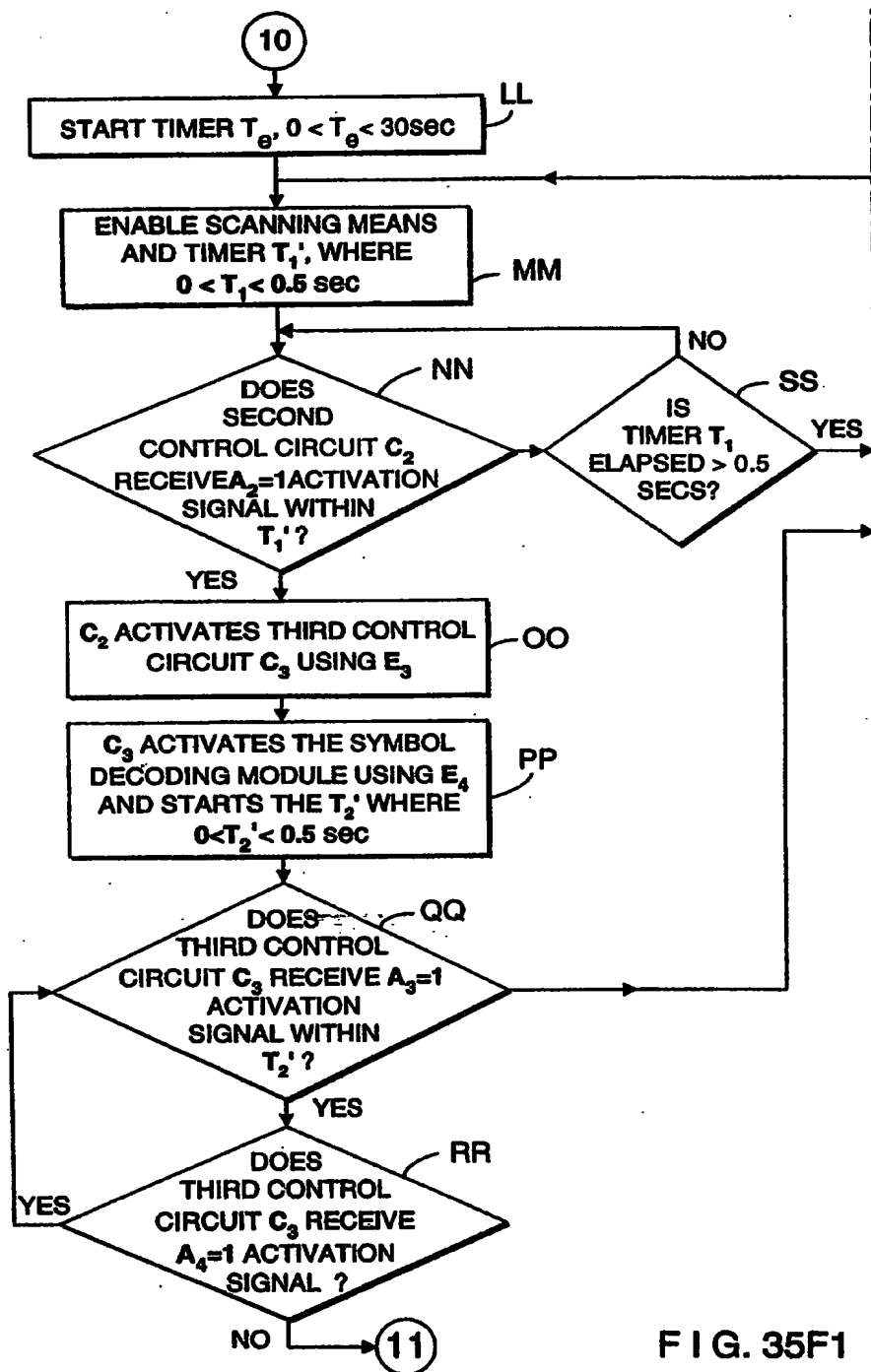


FIG. 35F1

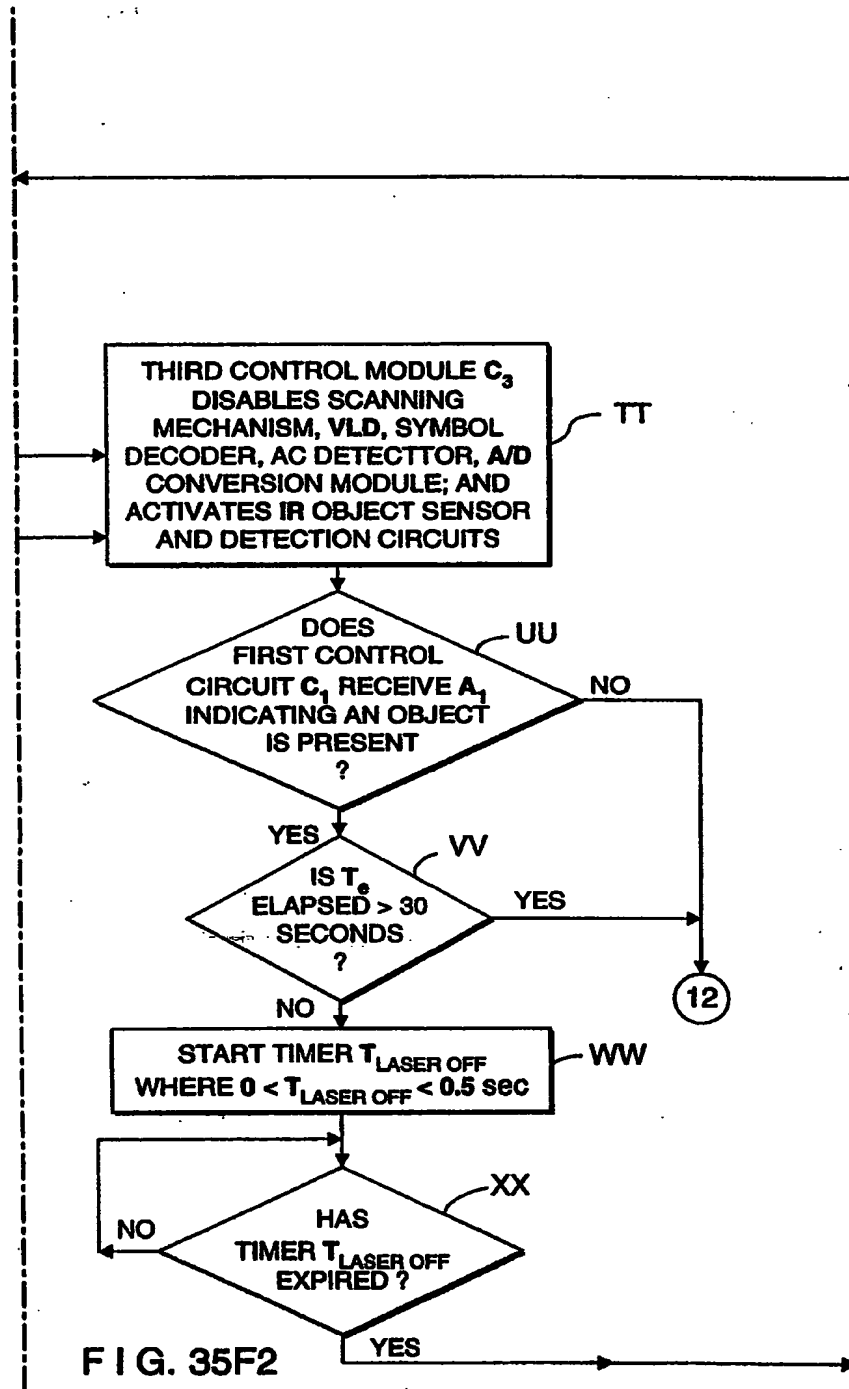
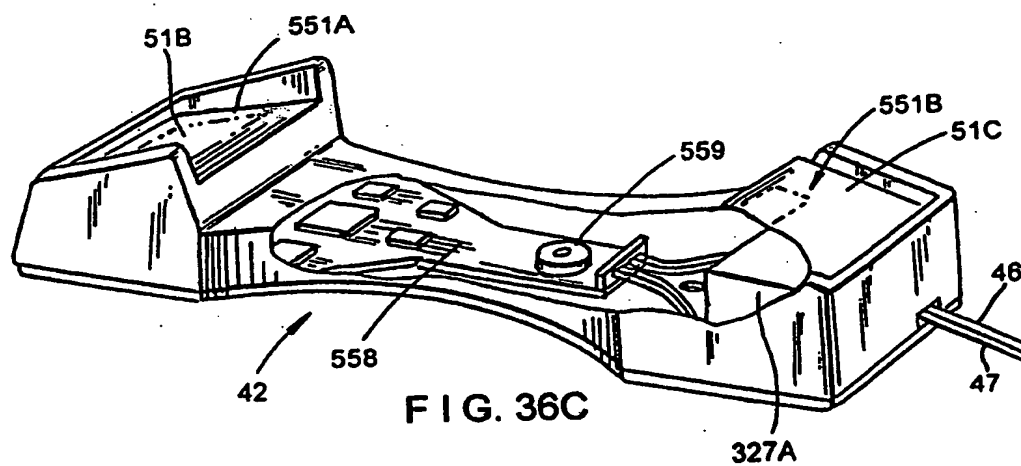
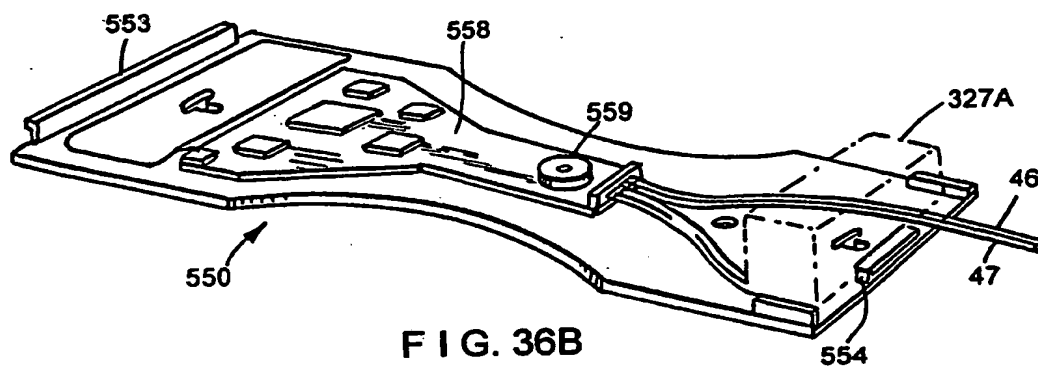
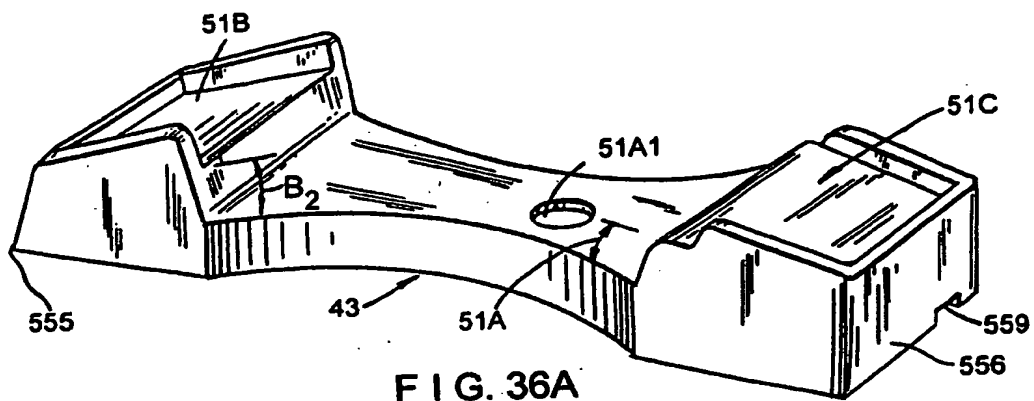


FIG. 35F2



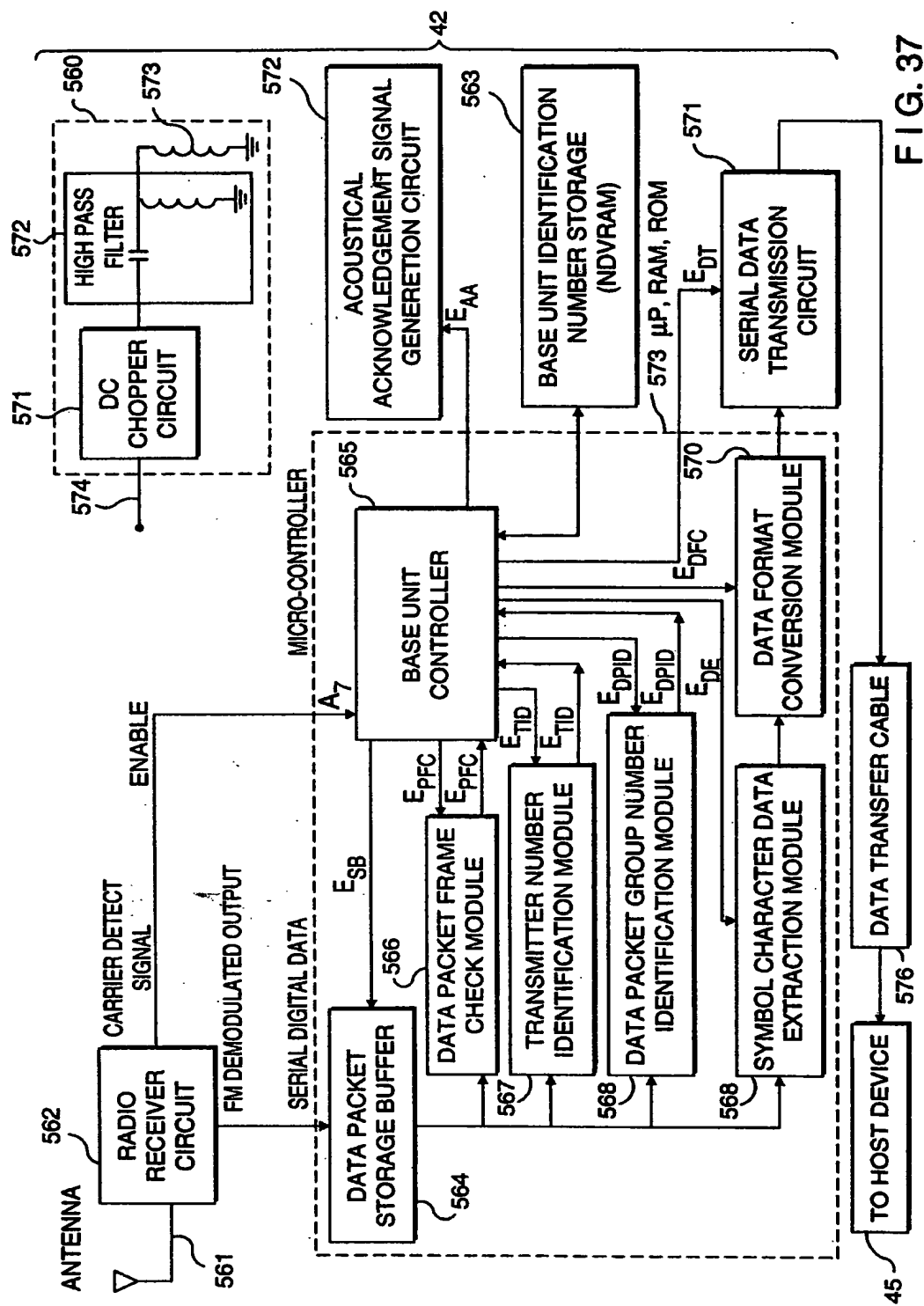


FIG. 37



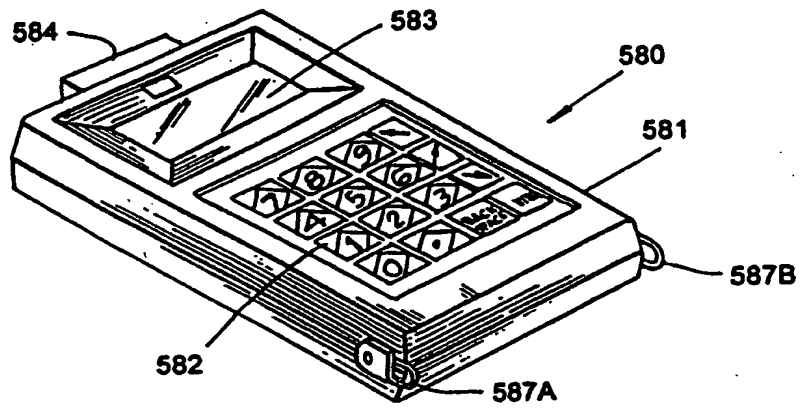


FIG. 38A



FIG. 38B

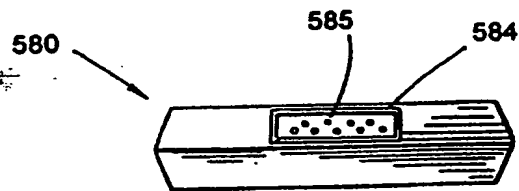


FIG. 38C

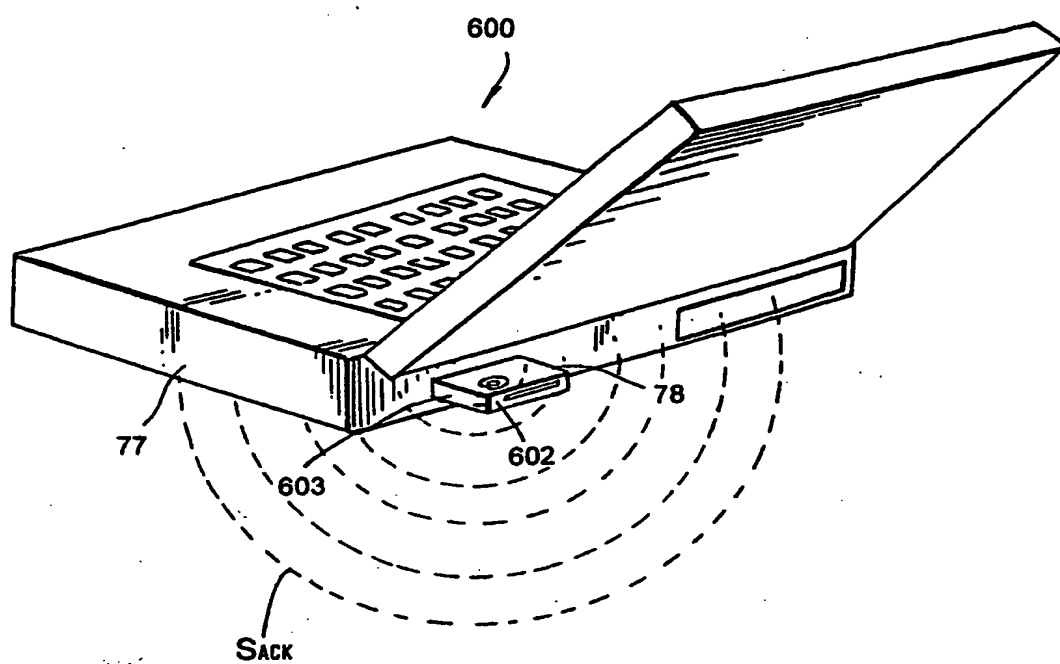


FIG. 39

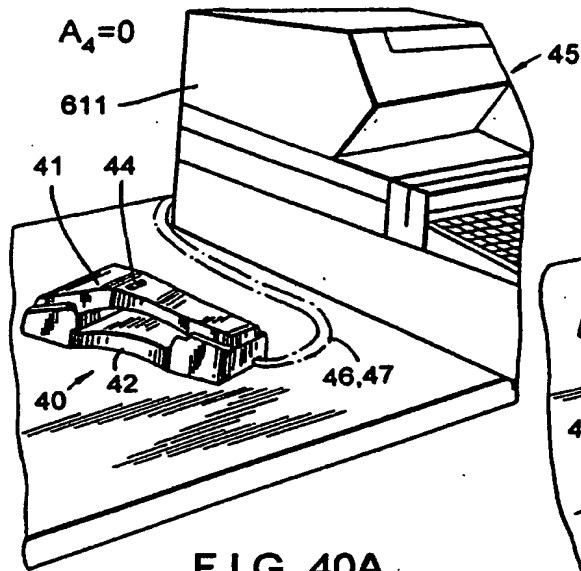


FIG. 40A

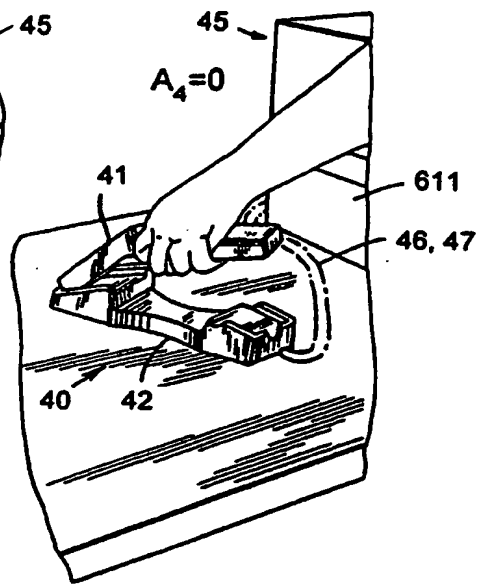


FIG. 40B

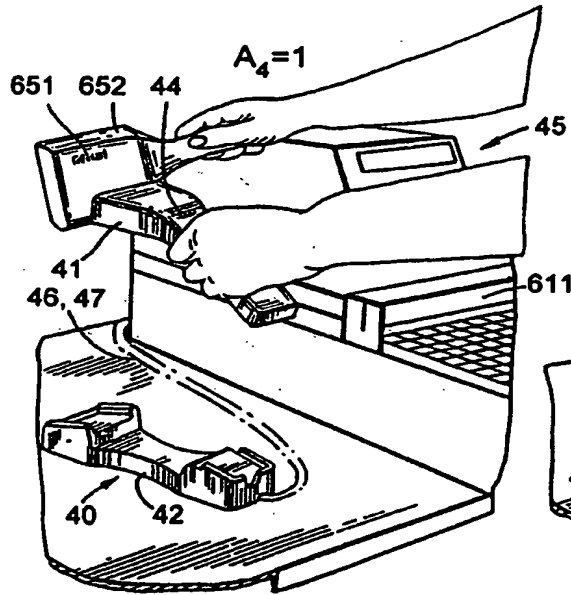


FIG. 40C

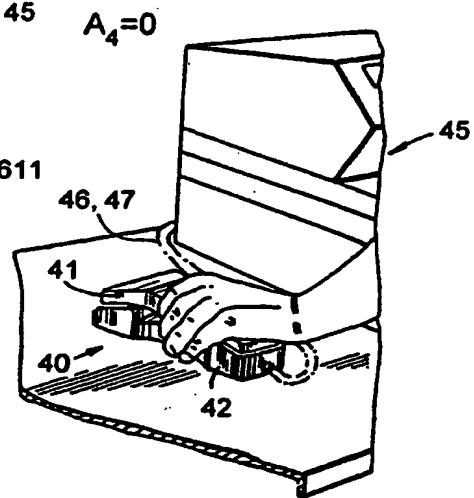


FIG. 40D

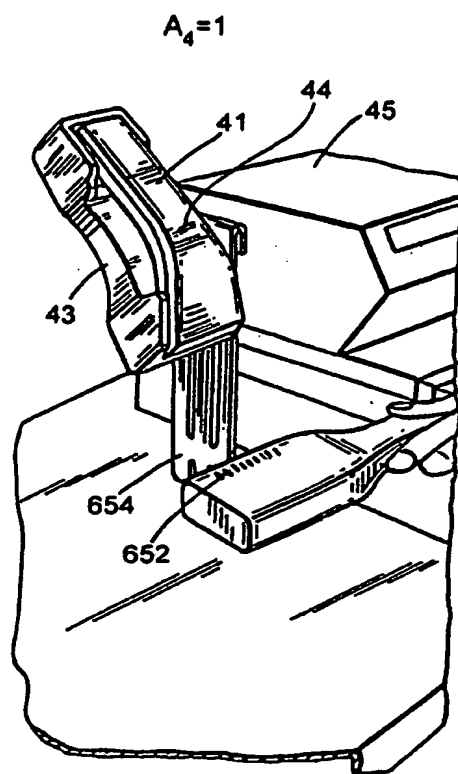


FIG. 41A

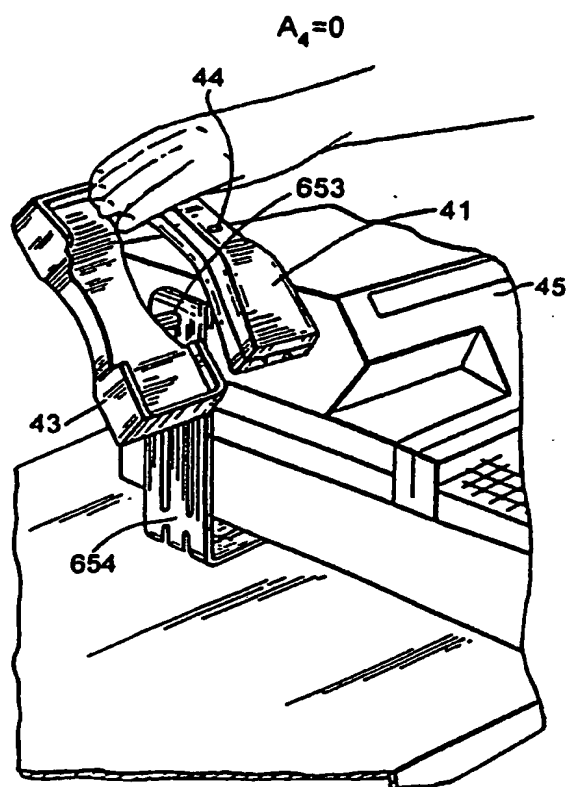


FIG. 41B

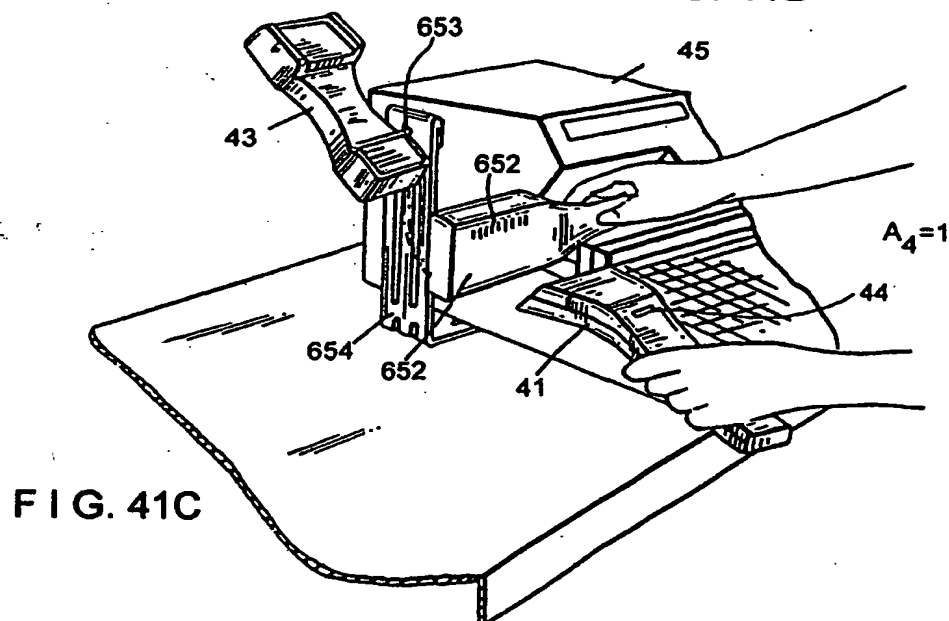
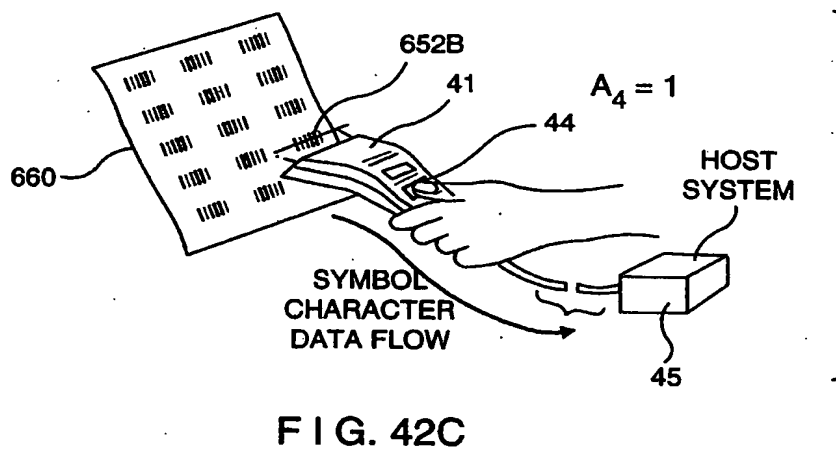
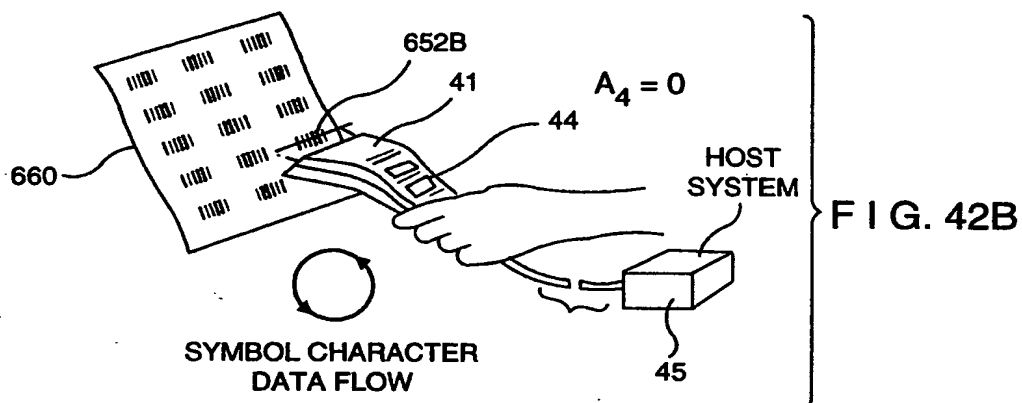
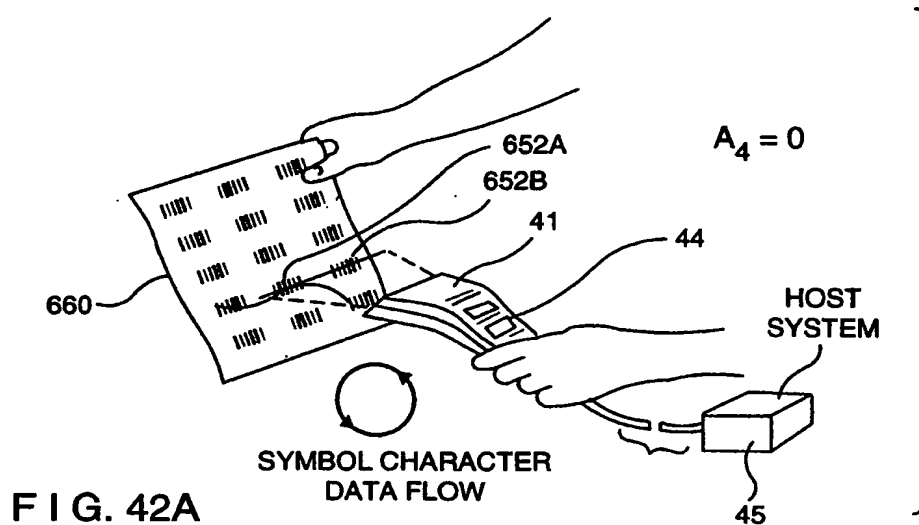


FIG. 41C



Automatic Bar Code Reading System With  
2-Way RF Communication Link

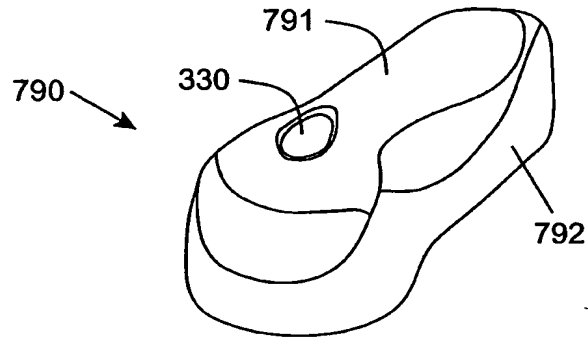


FIG. 43A

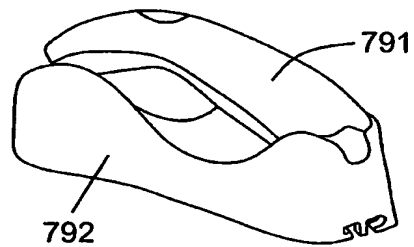


FIG. 43B

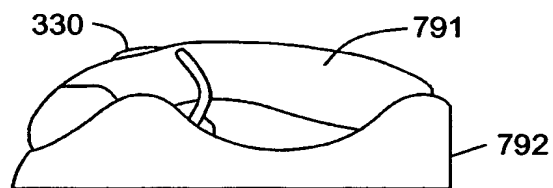


FIG. 43C

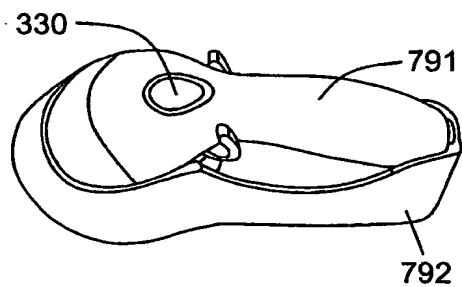


FIG. 43D

Protracted Configuration

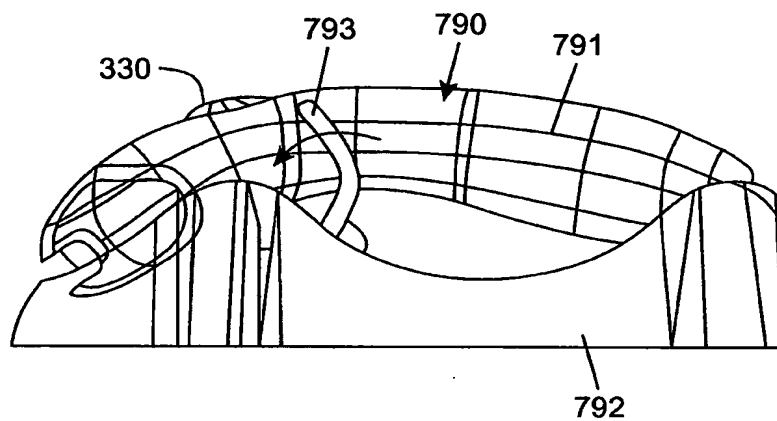


FIG. 43E

Protracted Configuration

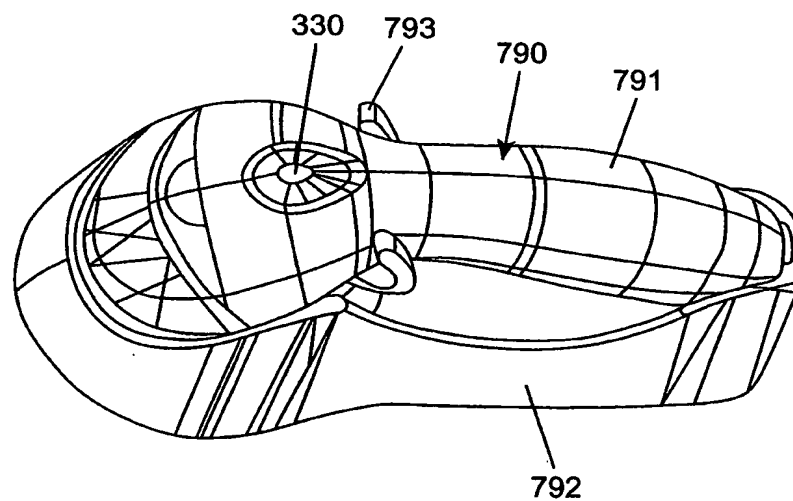


FIG. 43F

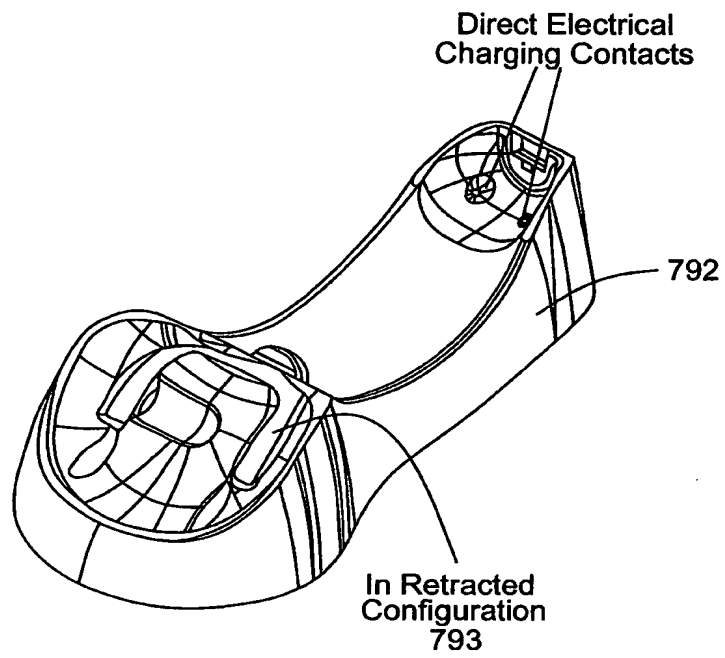


FIG. 43G

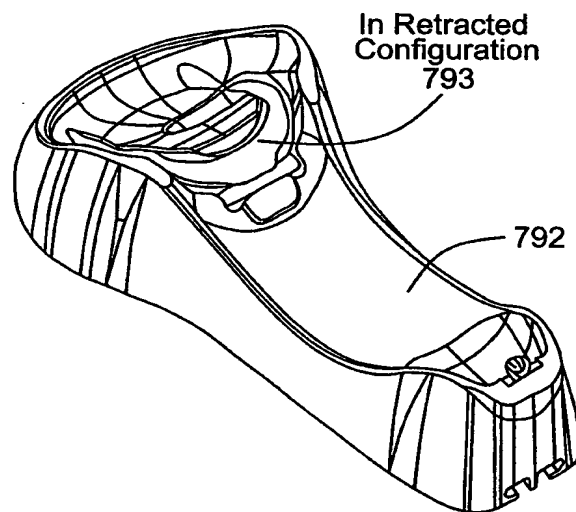


FIG. 43H



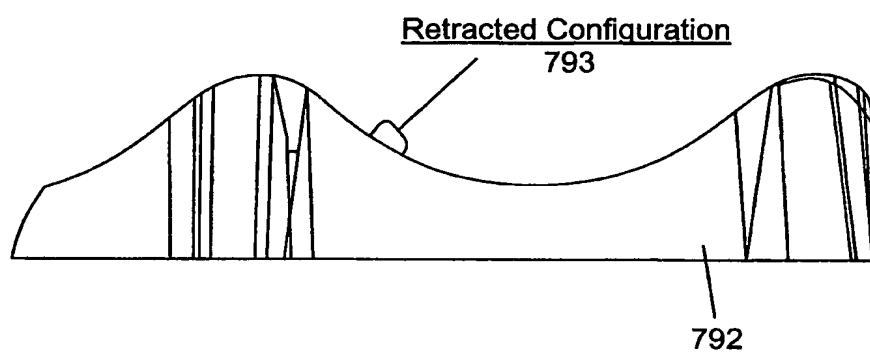


FIG. 43I

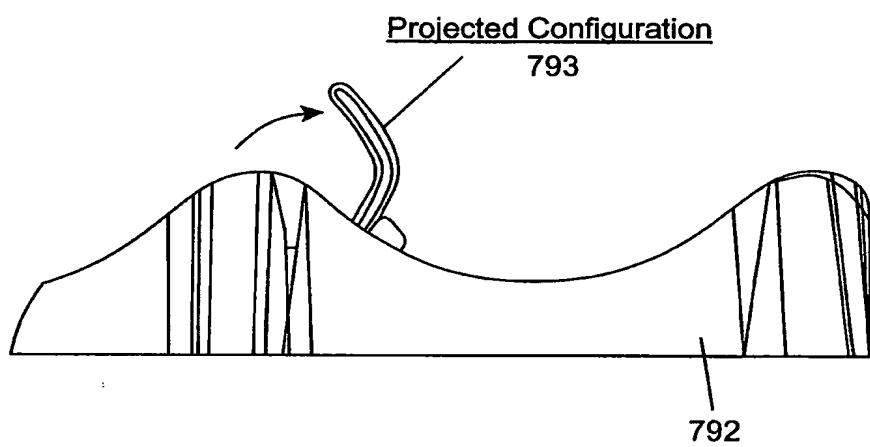


FIG. 43J

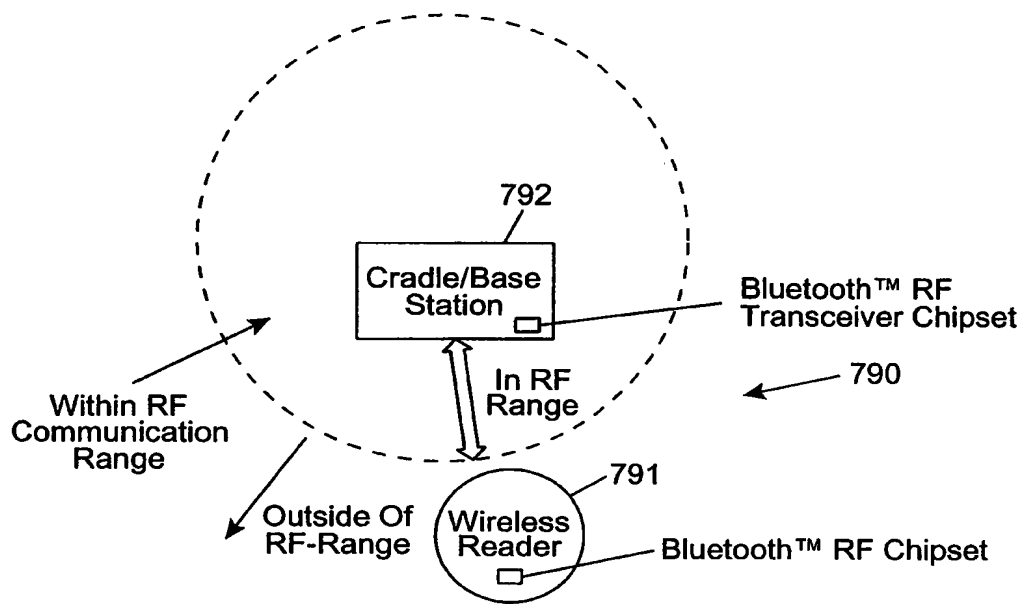


FIG. 44A1

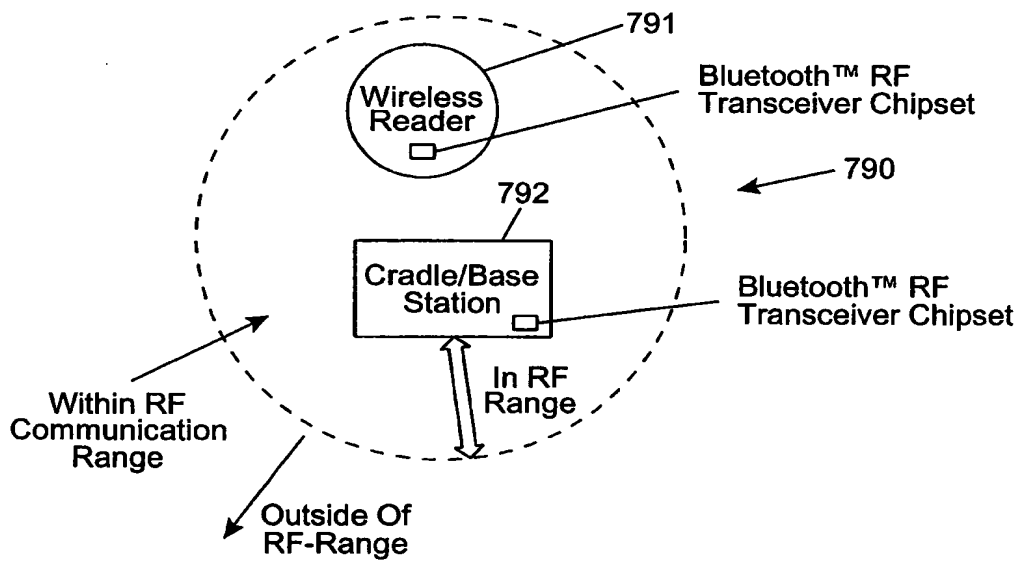


FIG. 44A2

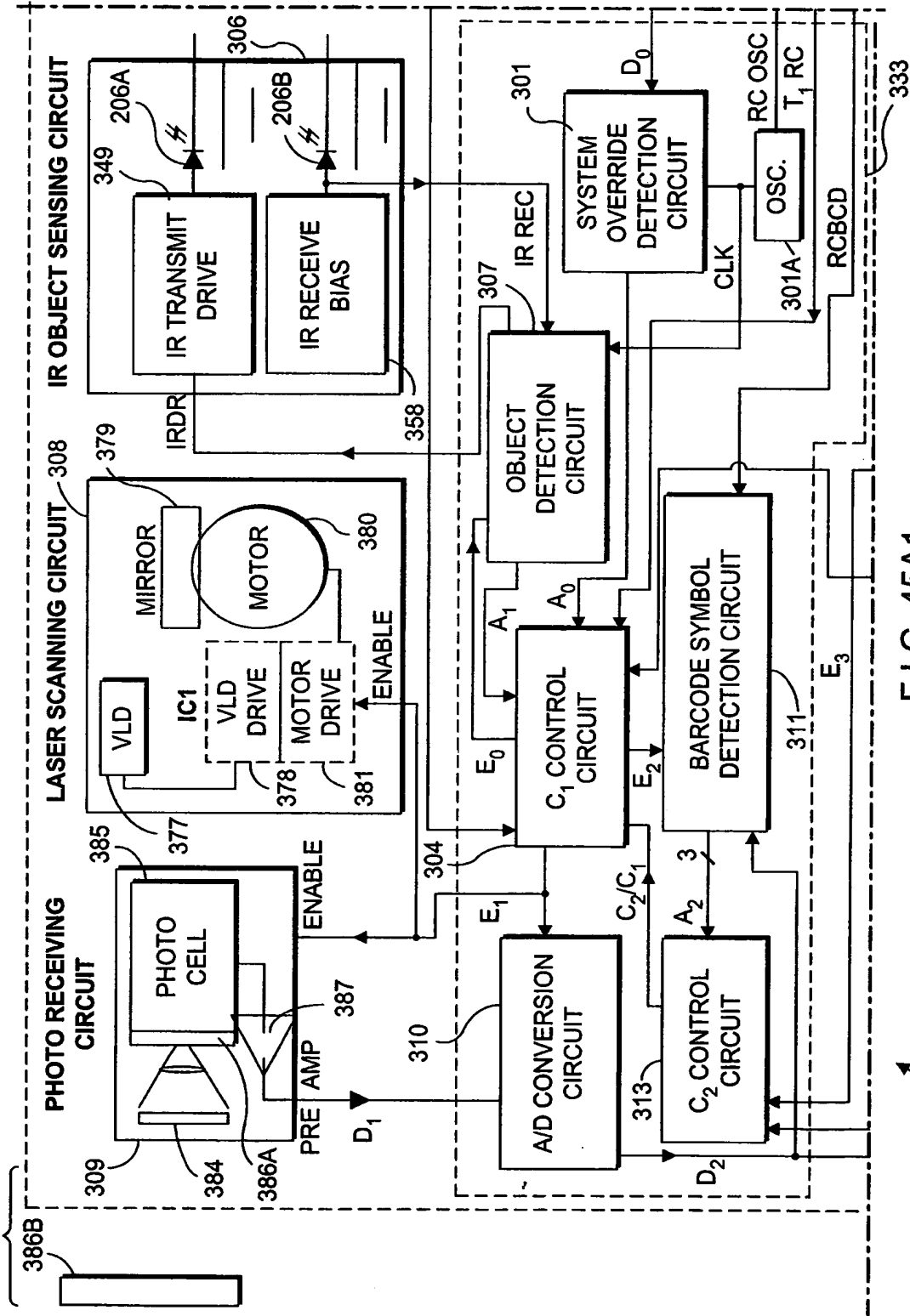


FIG. 45A1

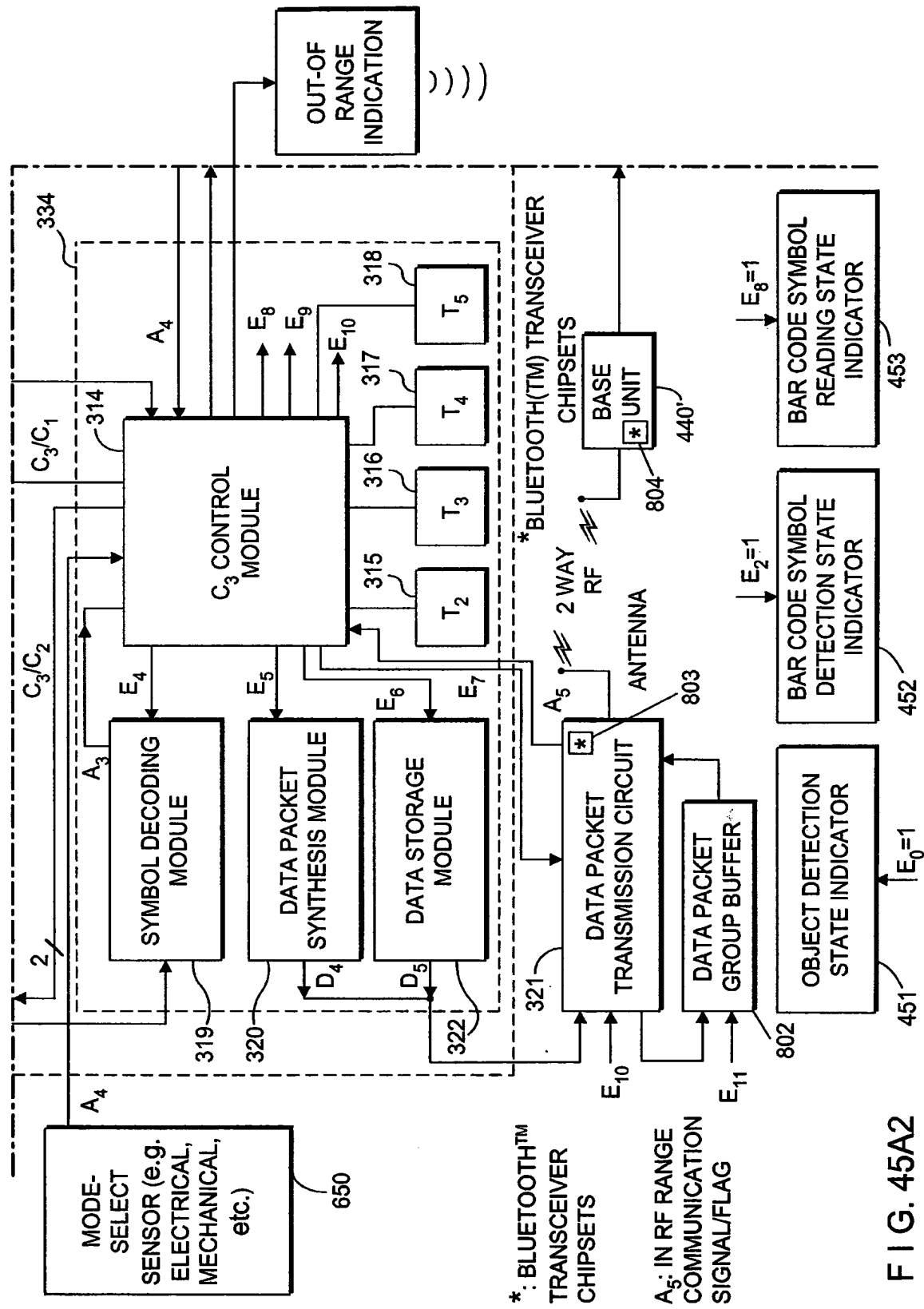


FIG. 45A2

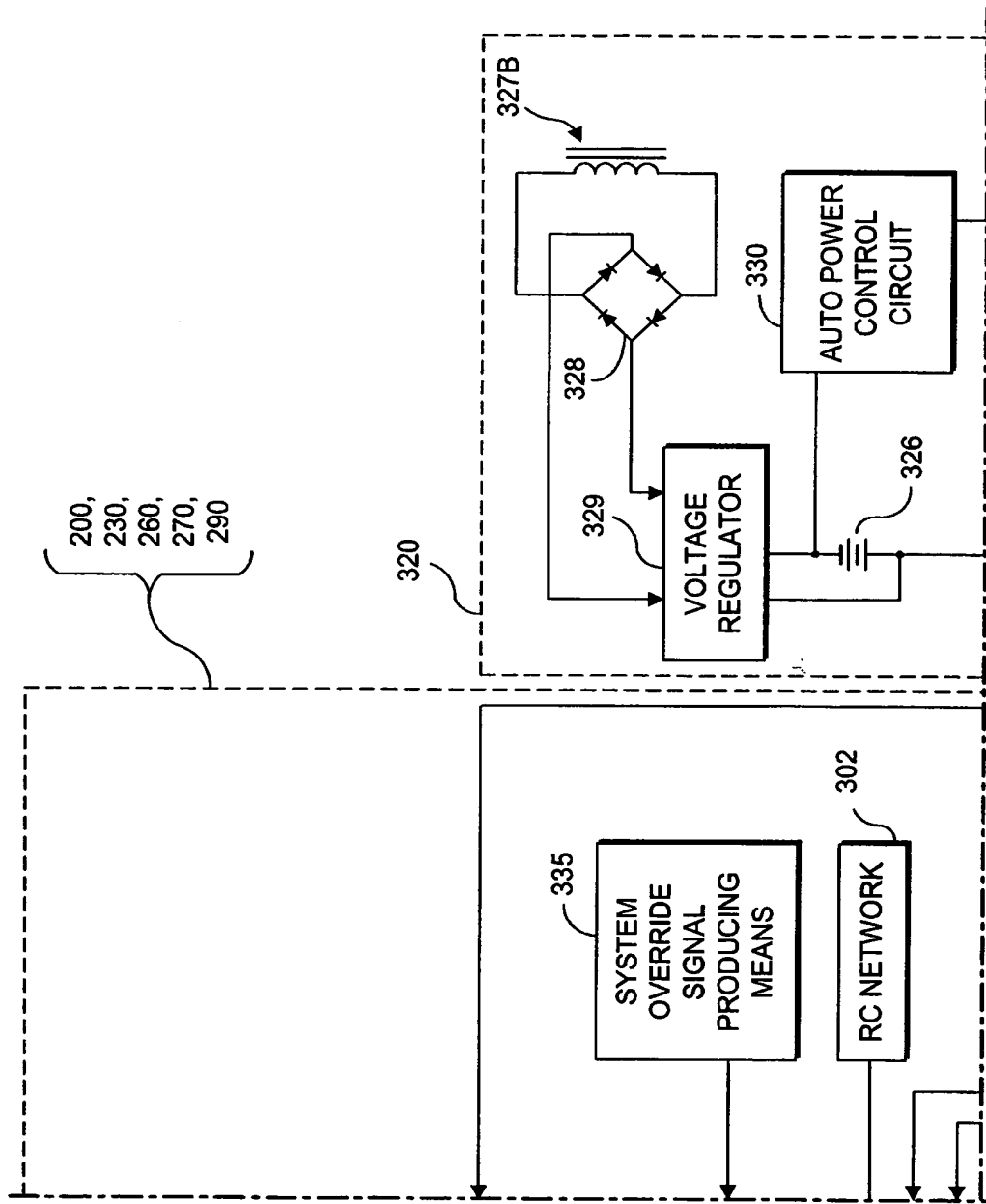


FIG. 45A3

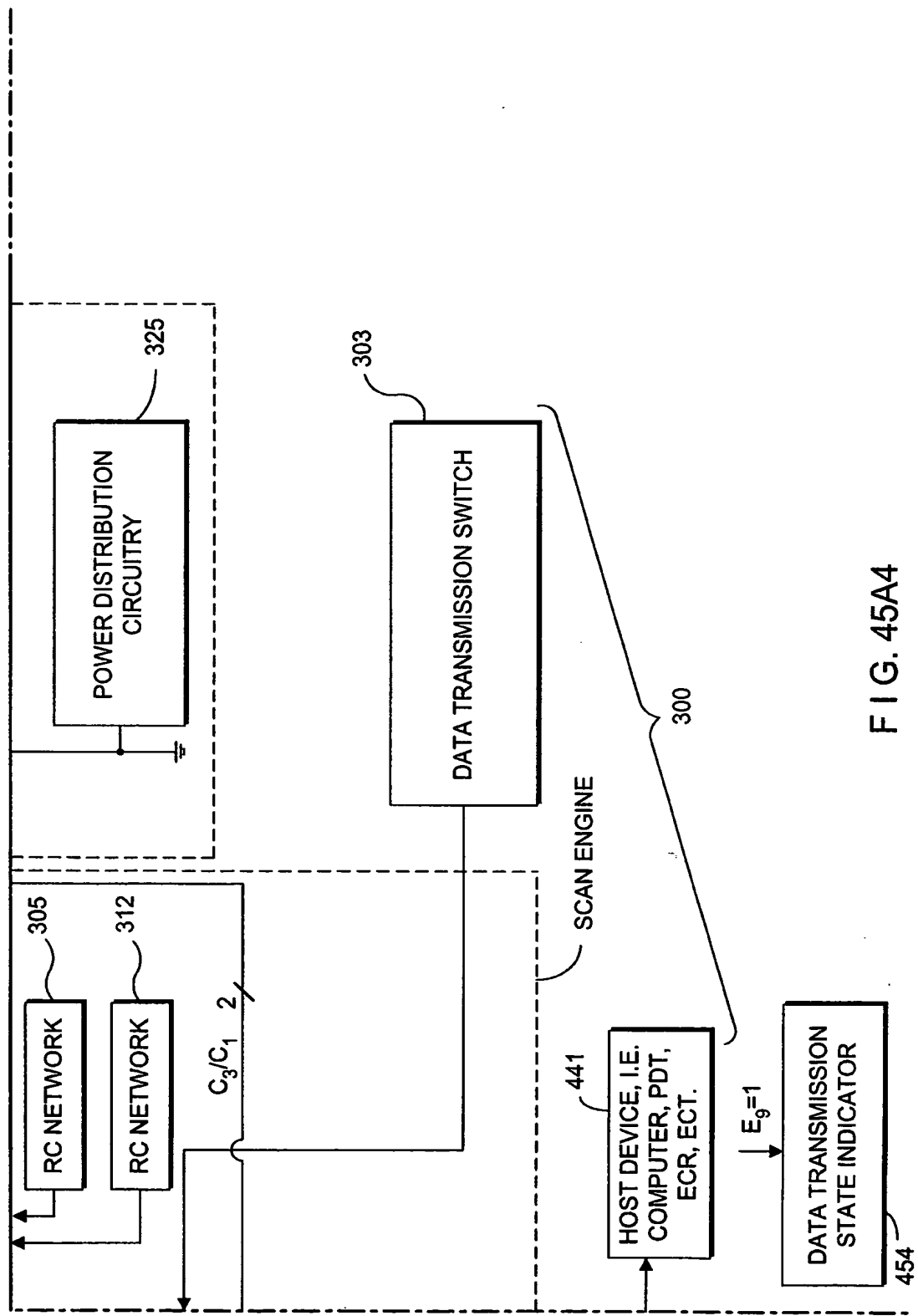


FIG. 45A4

"Direct-Contact Charge Technique"

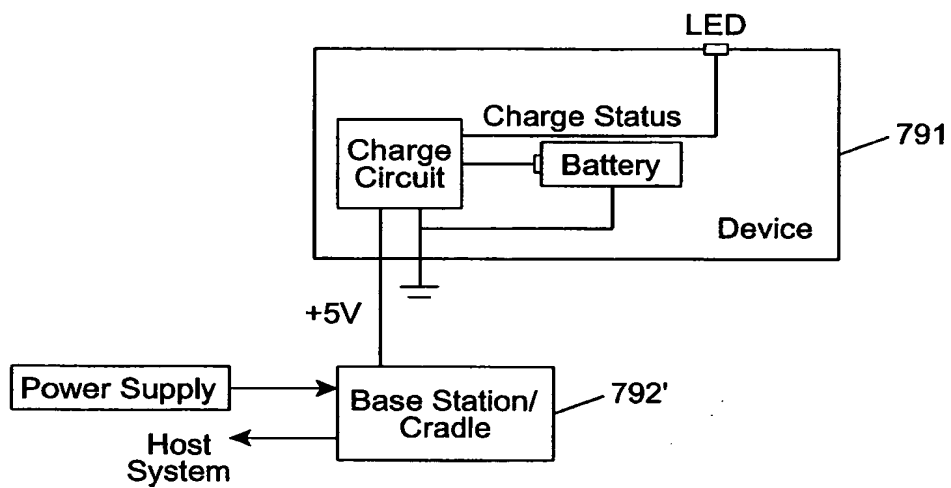


FIG. 45B

DATA PACKET TRANSMISSION VIA 2-WAY RF WITH  
AUTOMATIC RF-RANGE DEPENDENT CONTROL

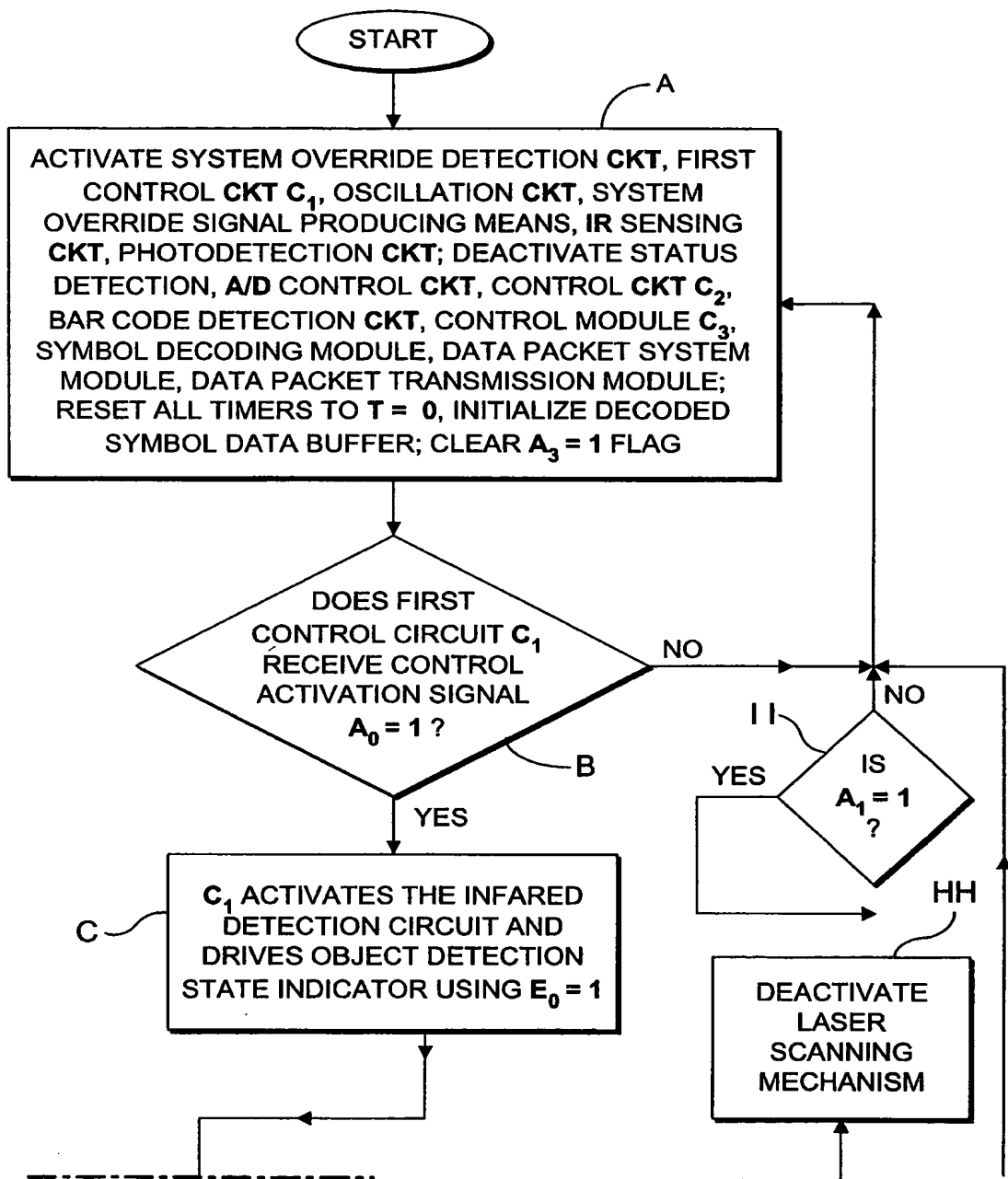
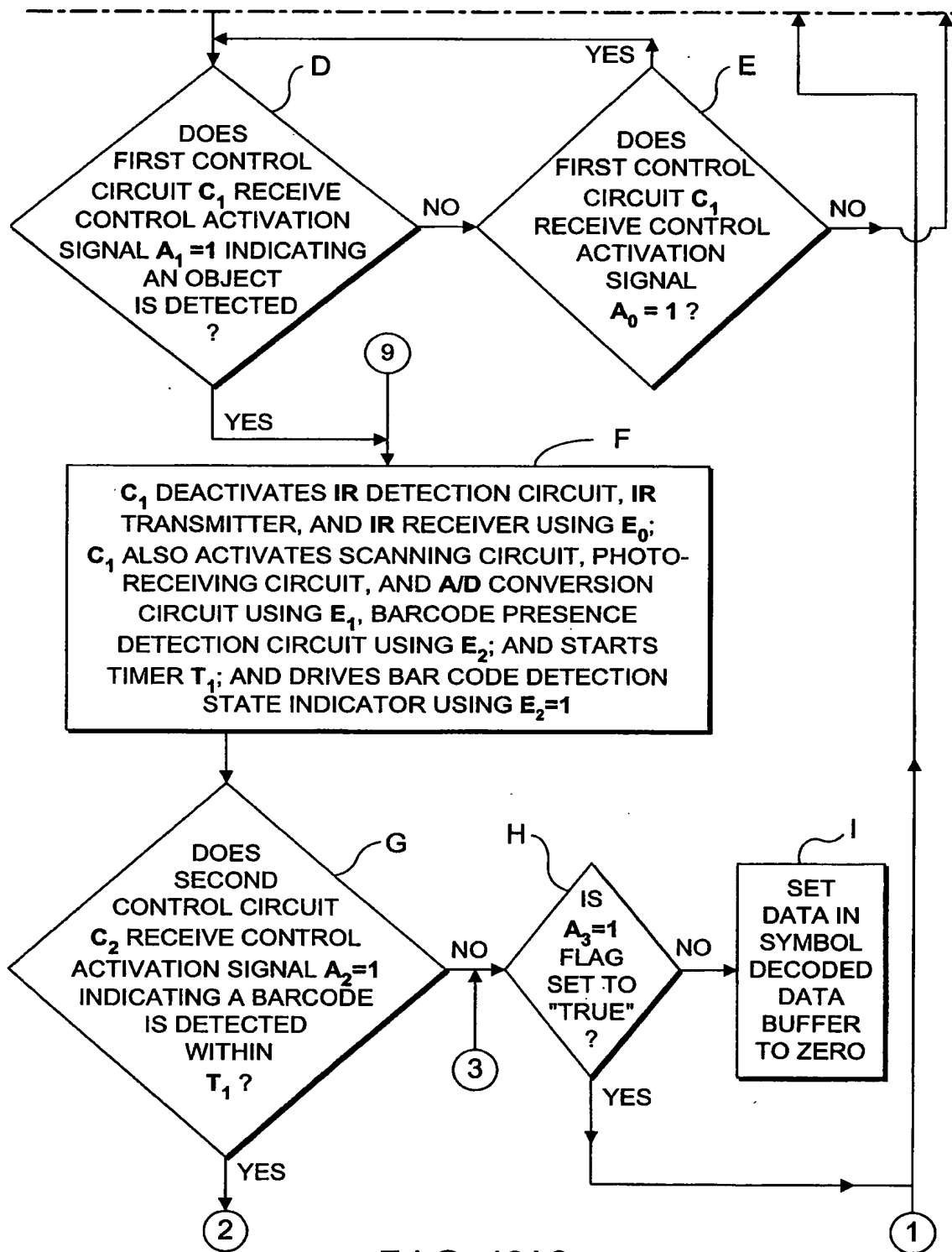


FIG. 46A1





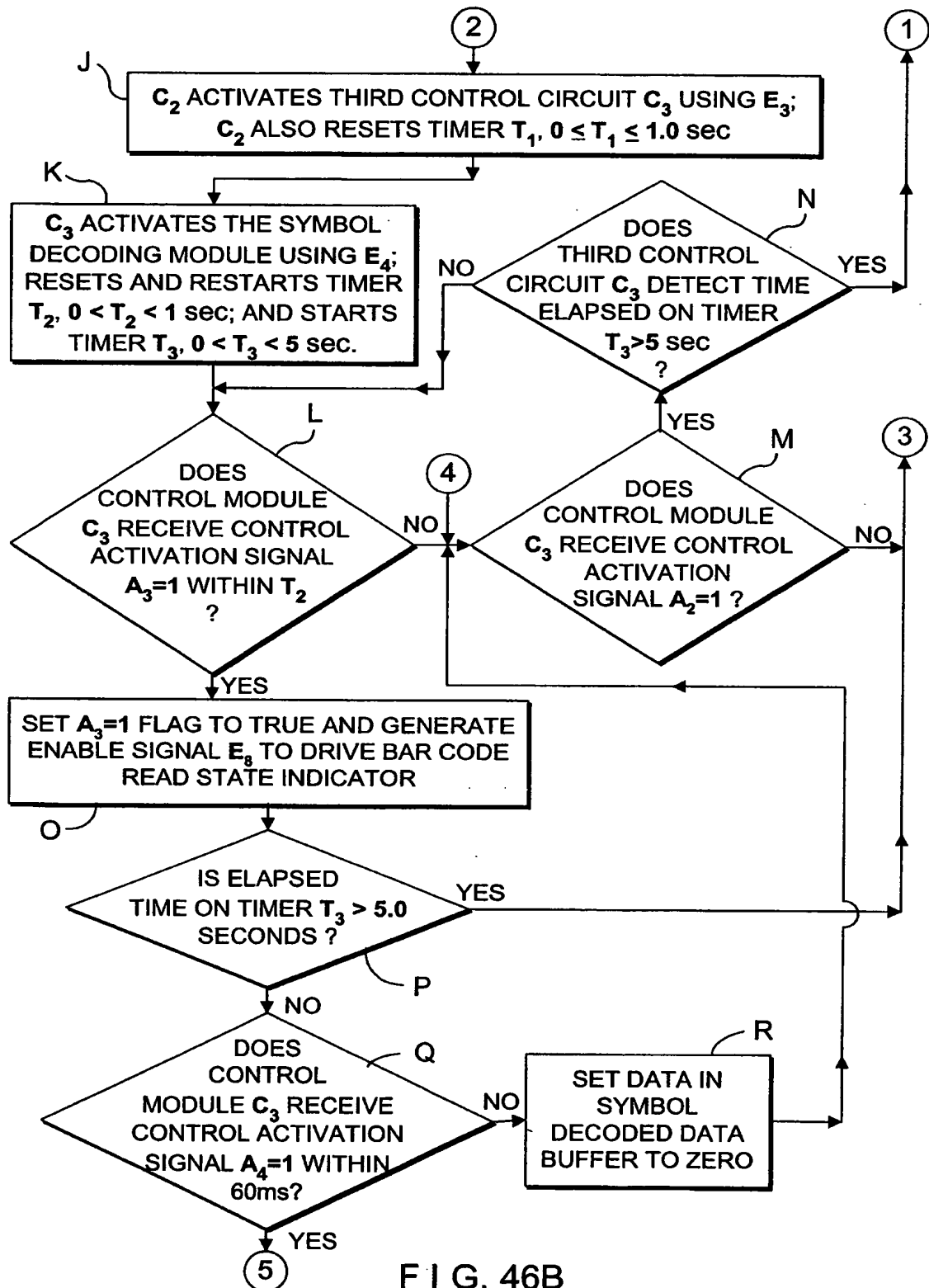
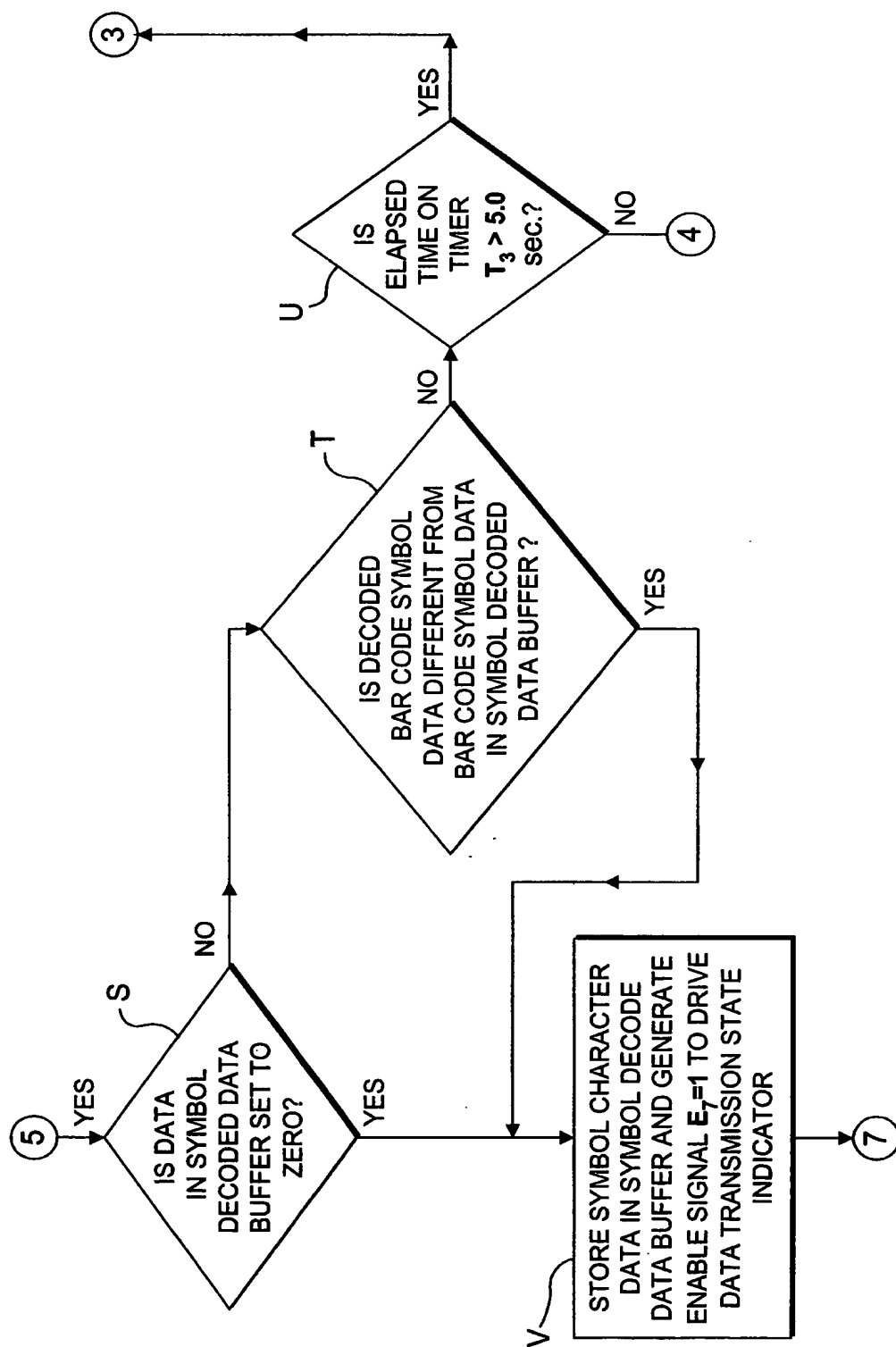


FIG. 46B



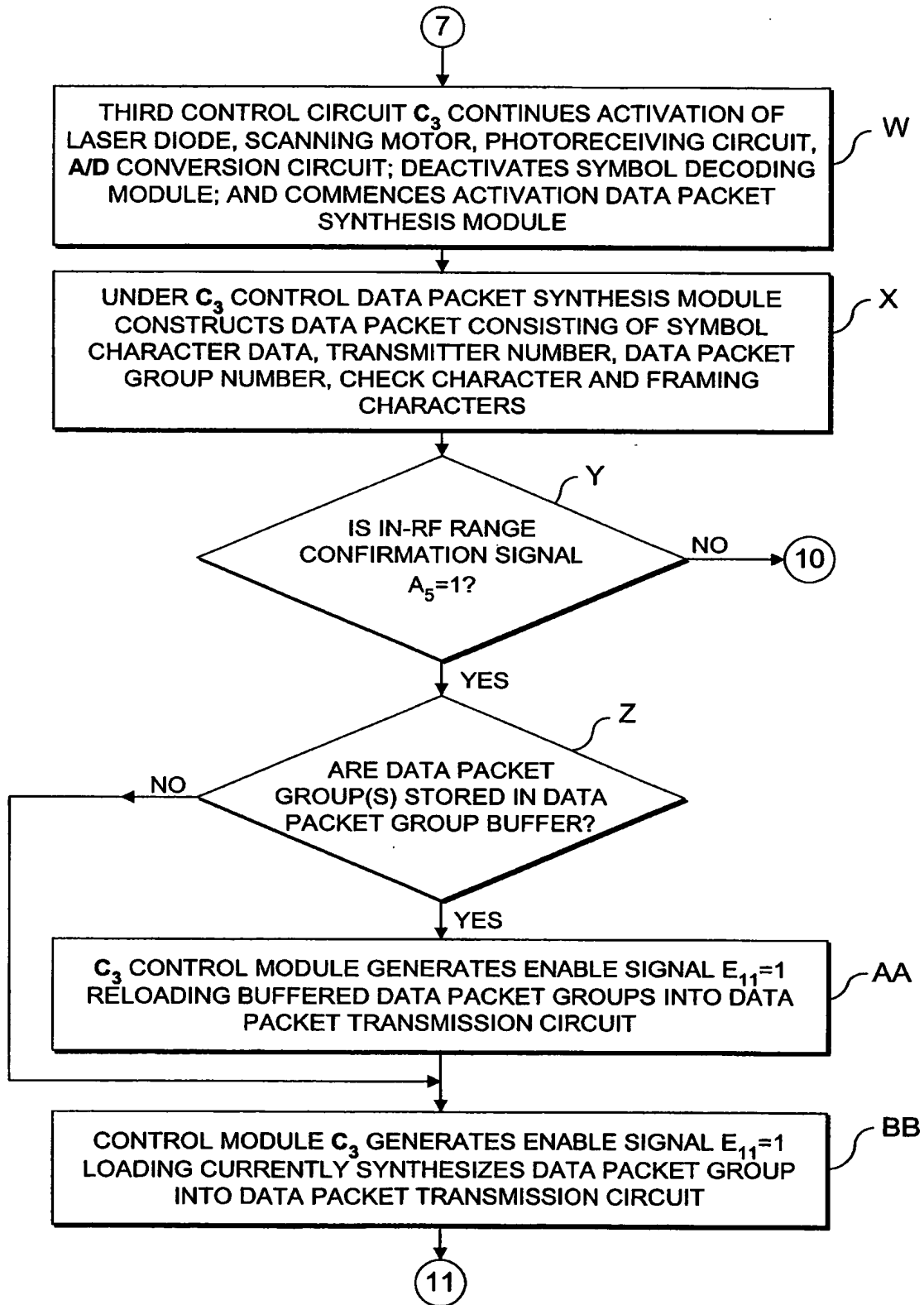


FIG. 46C2

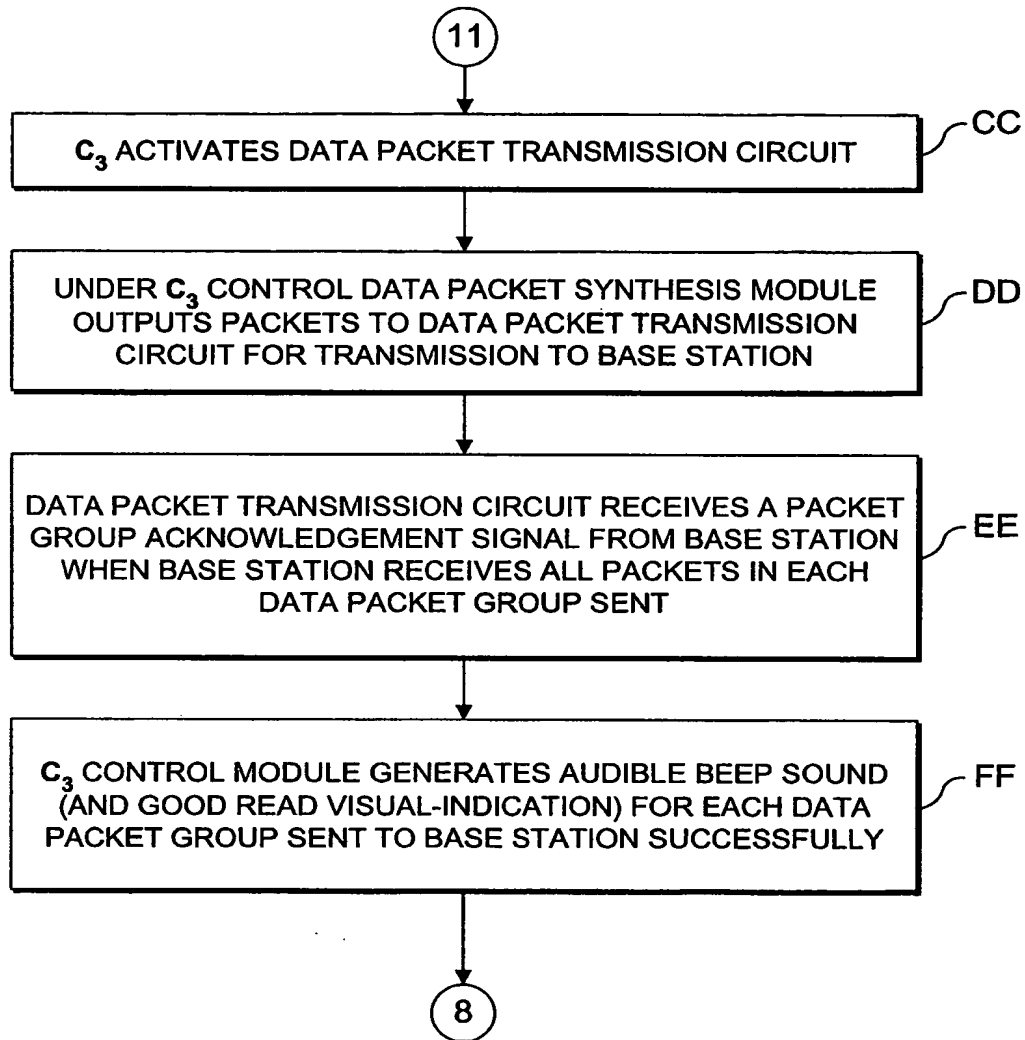


FIG. 46C3

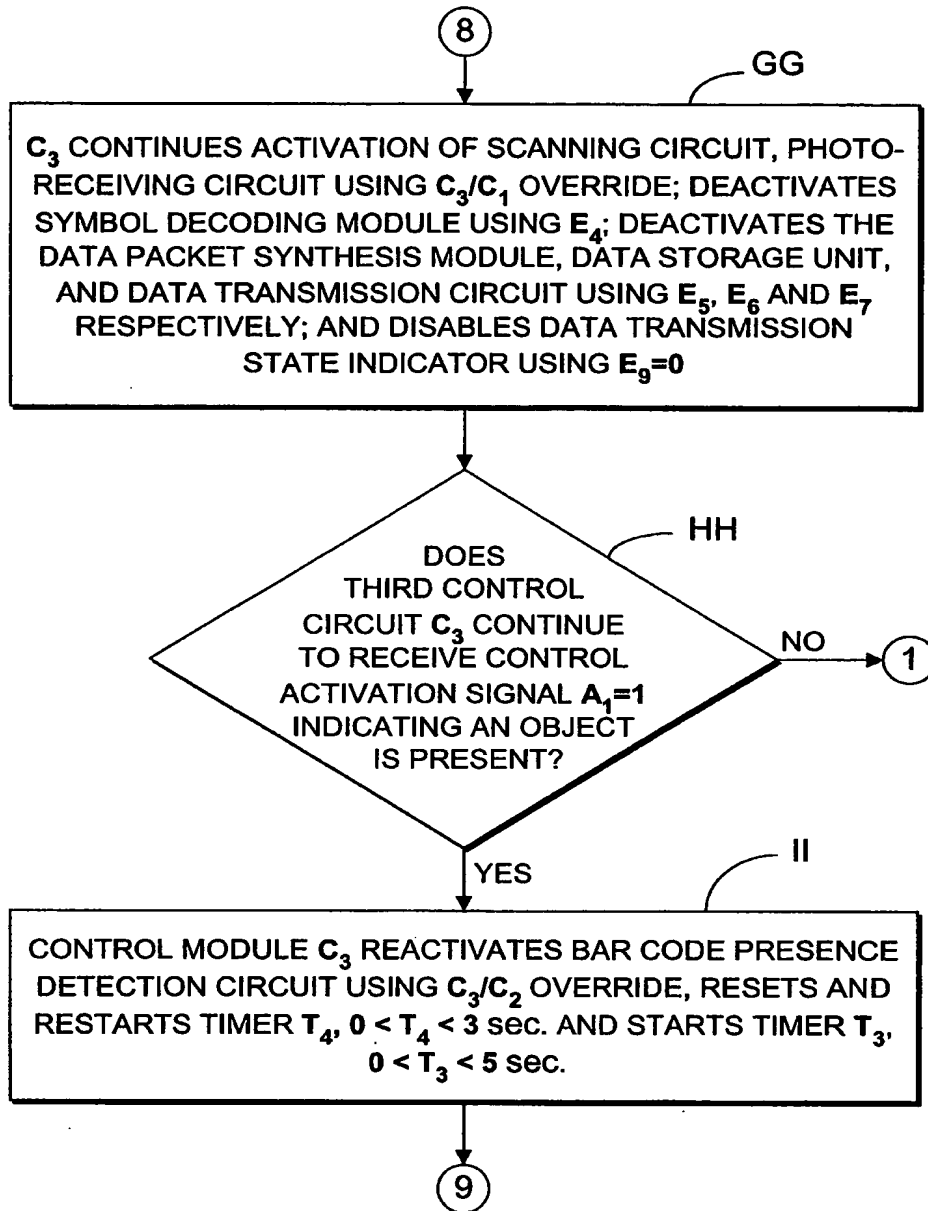


FIG. 46C4

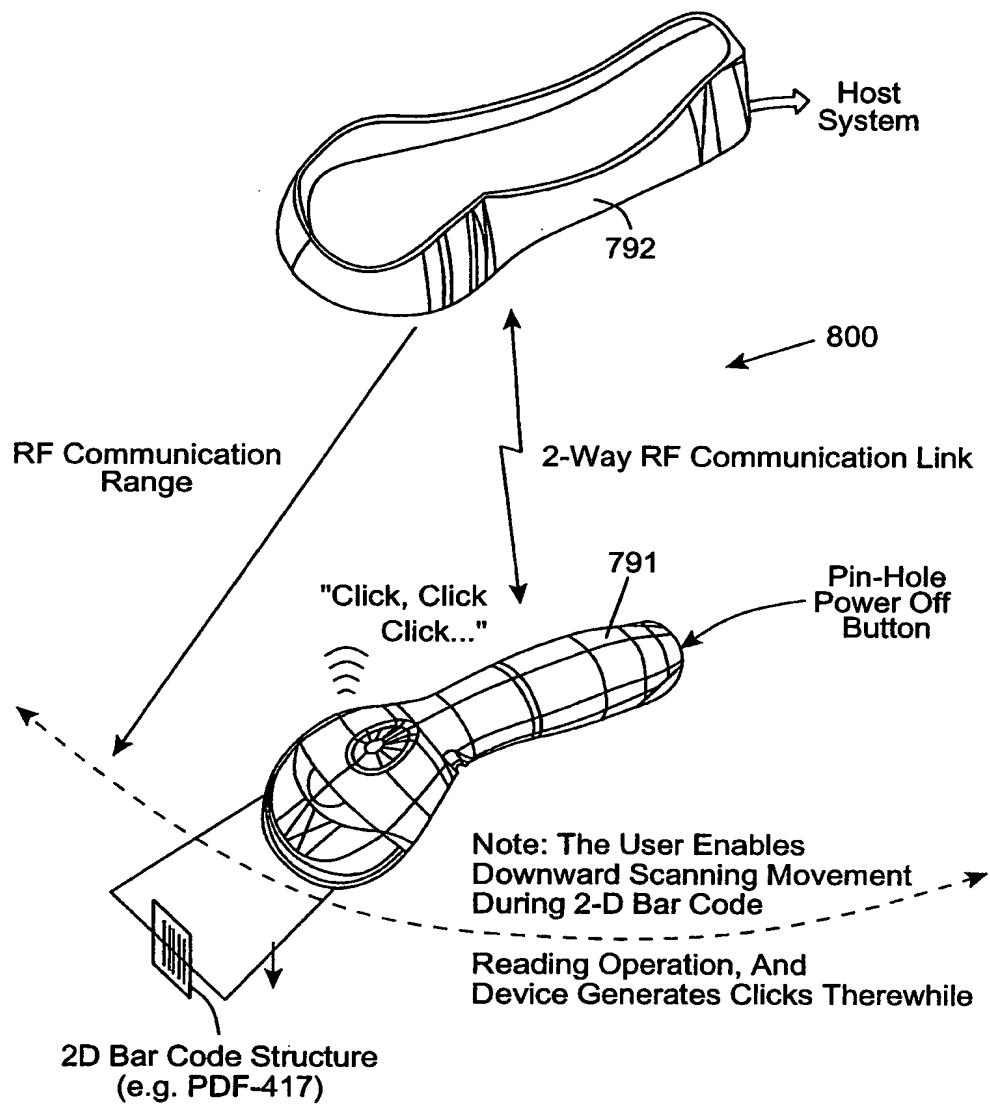


FIG. 47

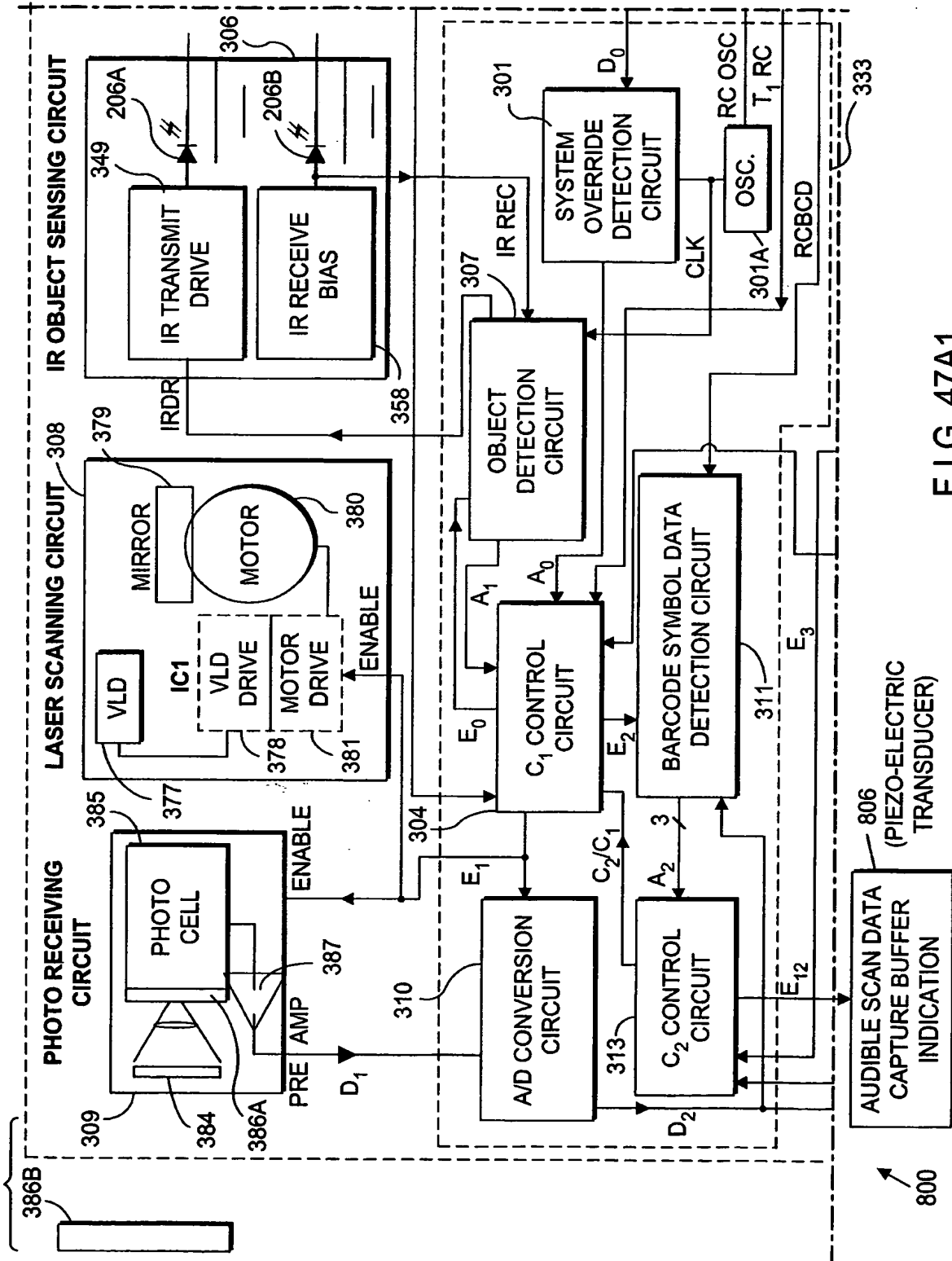


FIG. 47A1



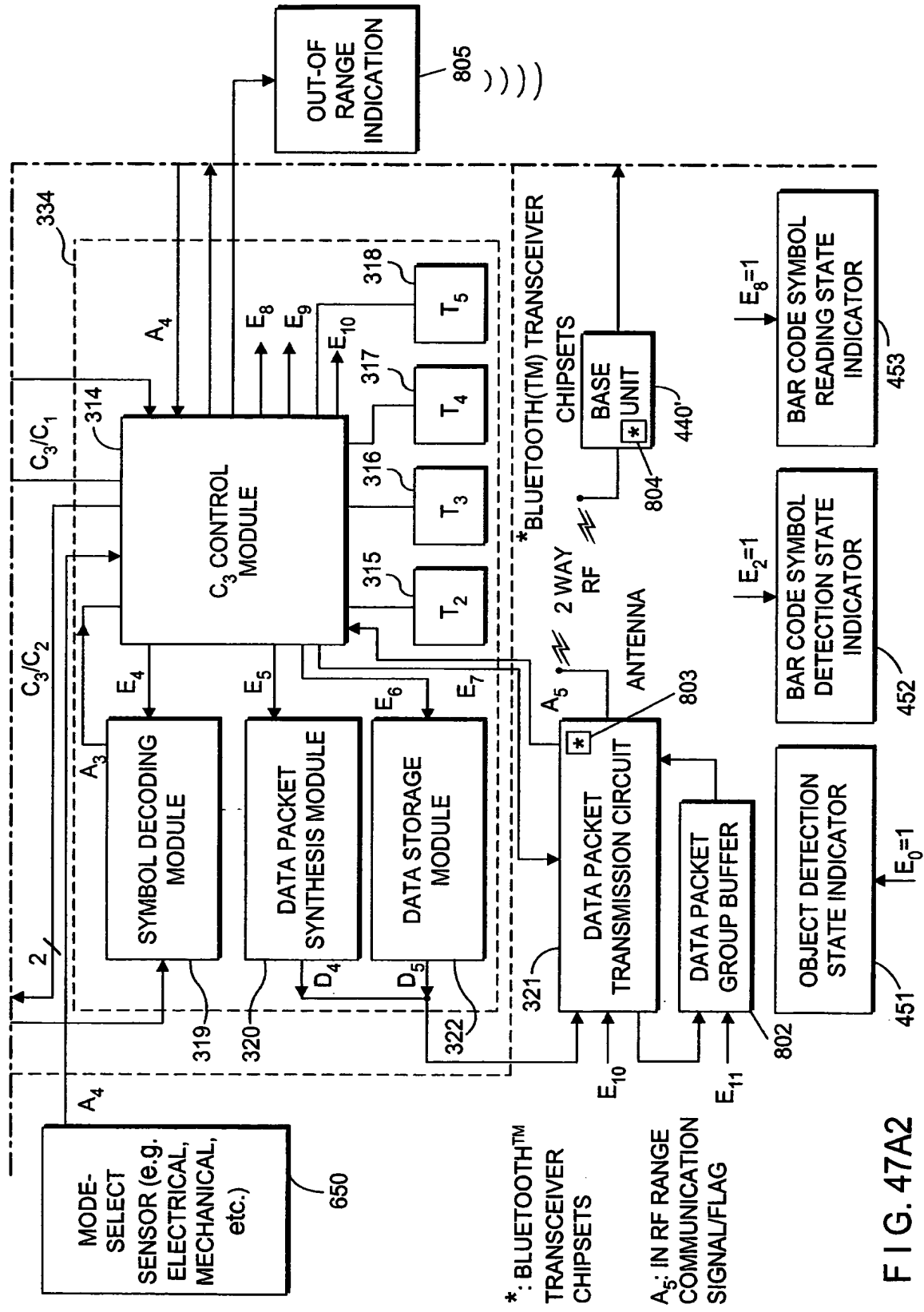
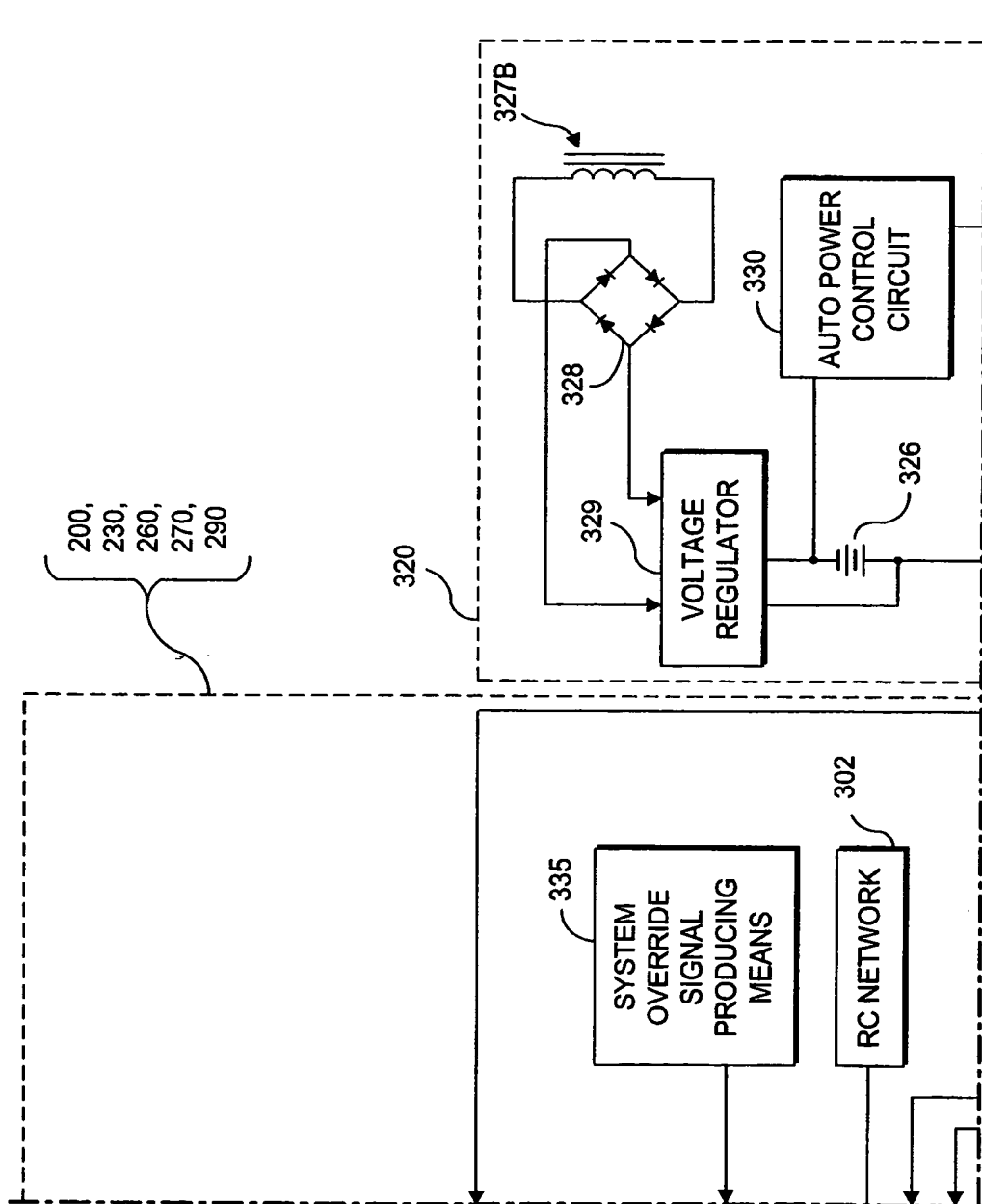


FIG. 47A2



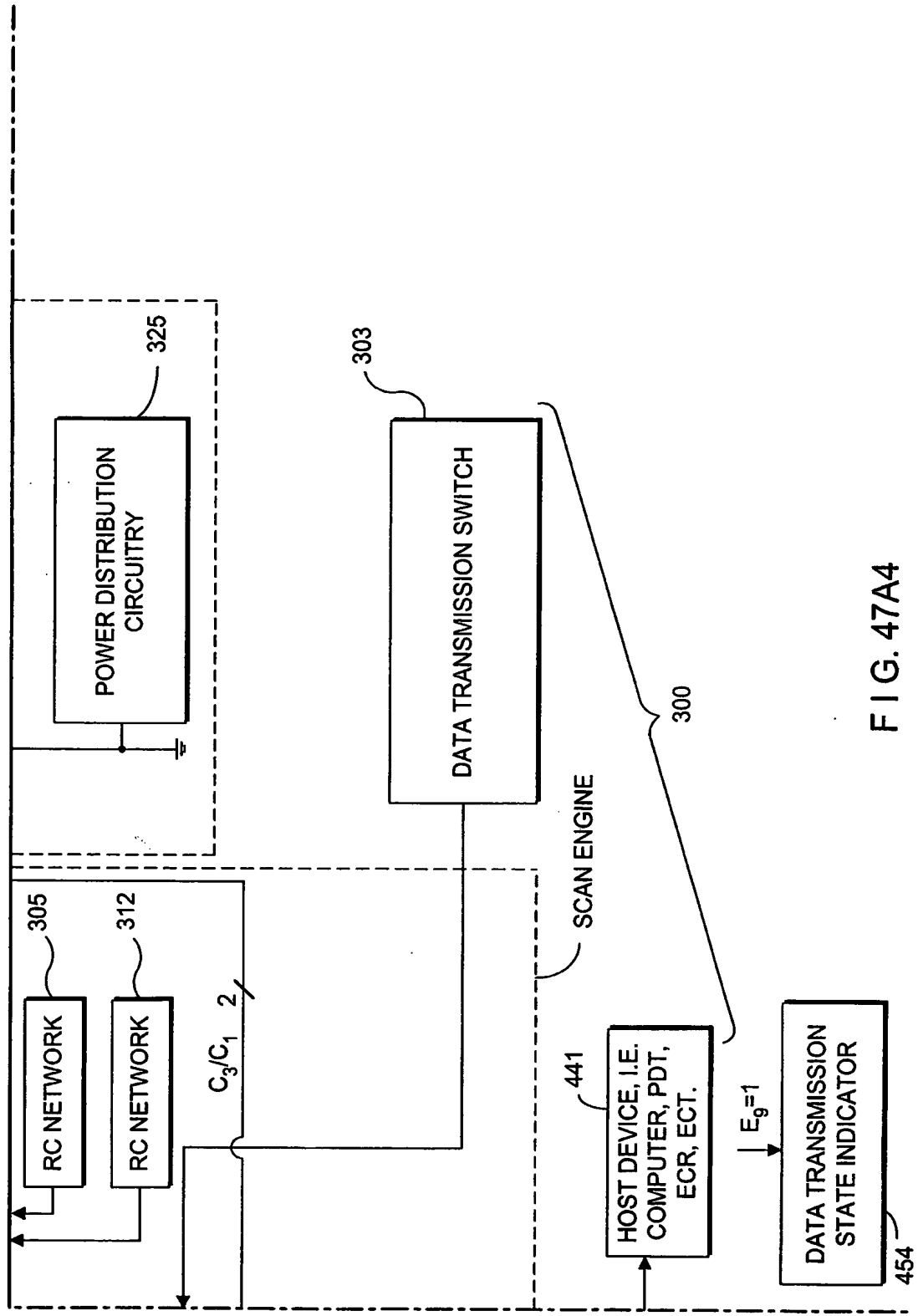


FIG. 47A4

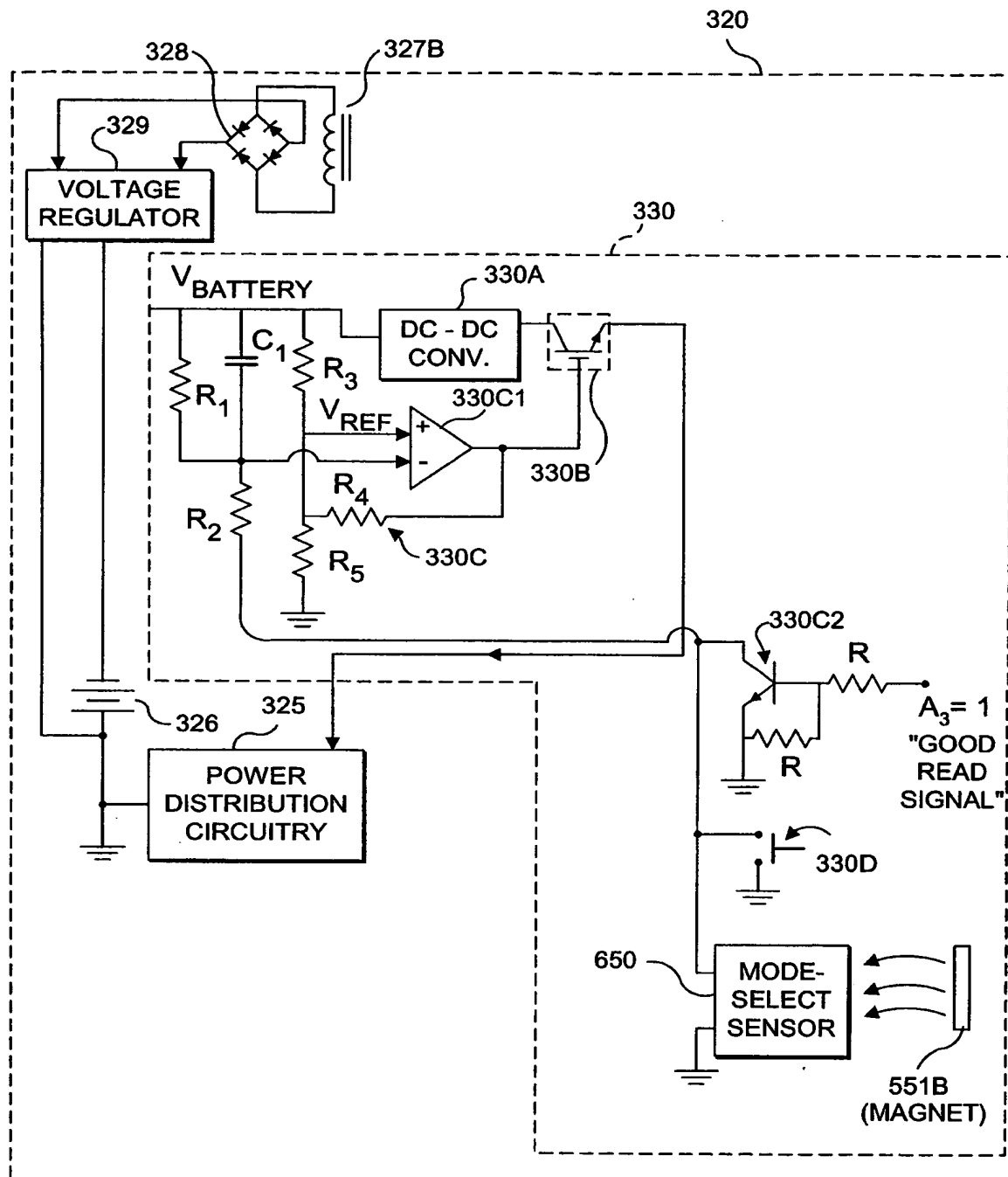


FIG. 47B

PDF DATA PACKET TRANSMISSION VIA 2-WAY RF WITH  
AUTOMATIC RF-RANGE DEPENDENT CONTROL  
(2-D READING MODE)

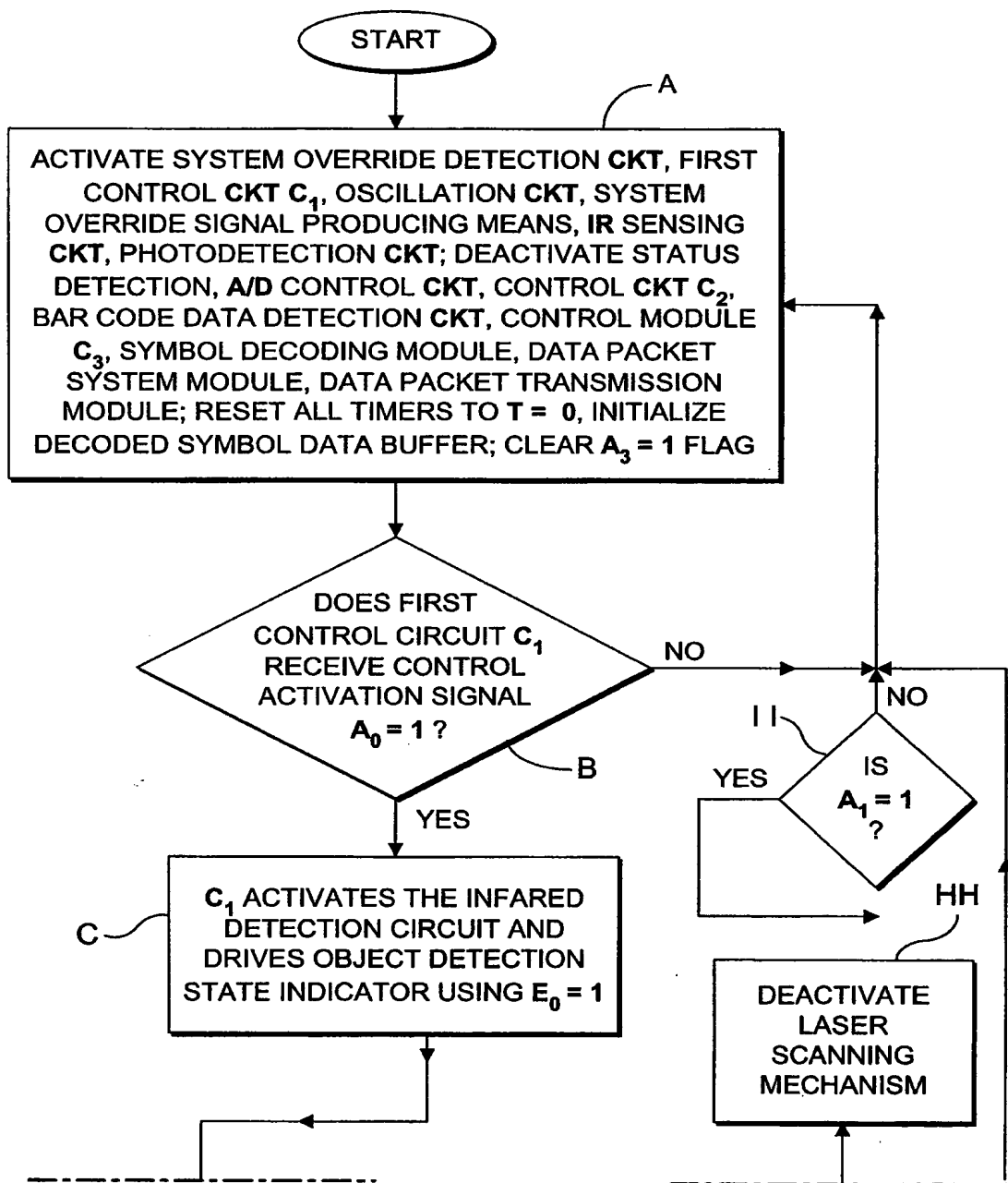


FIG. 48A1

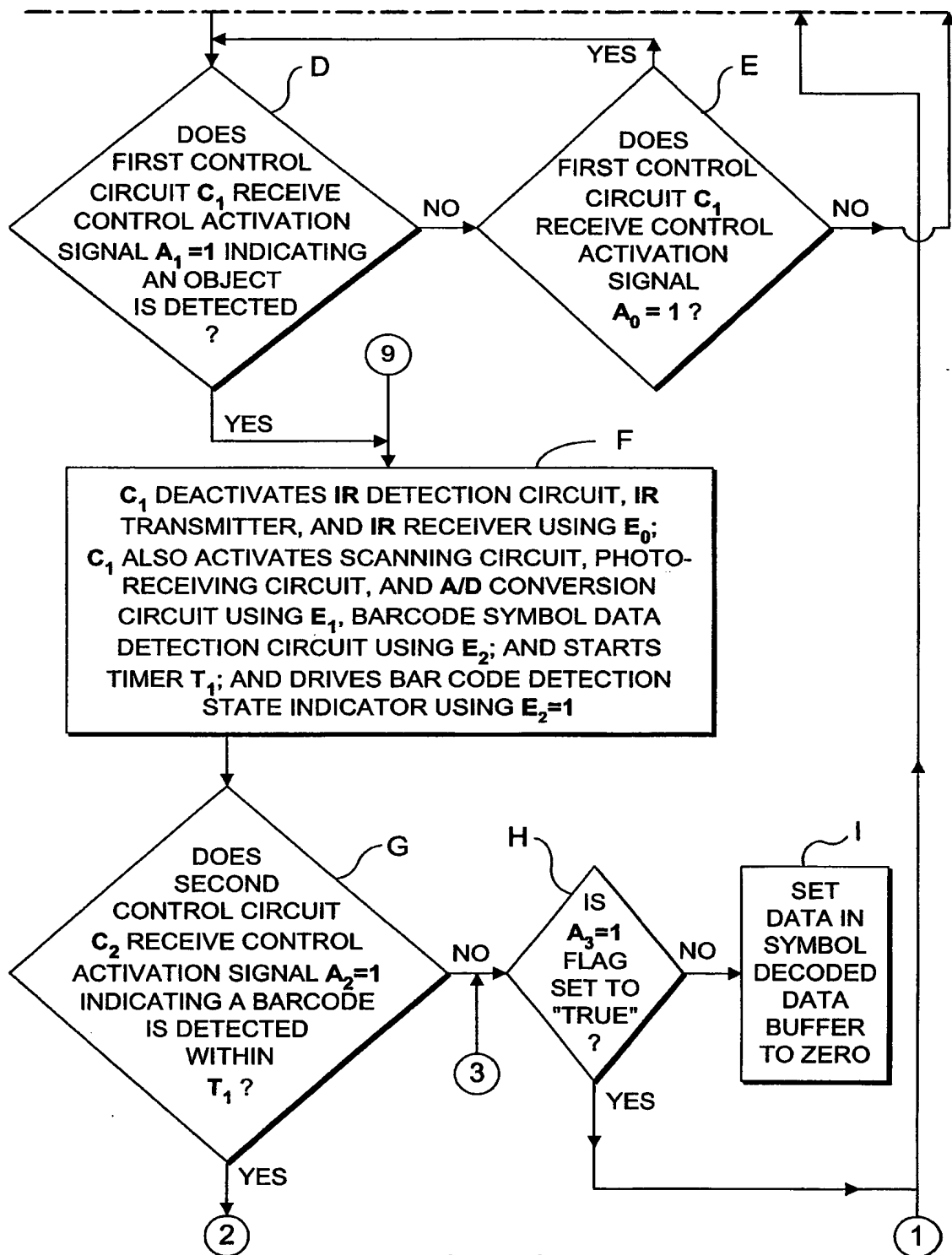


FIG. 48A2

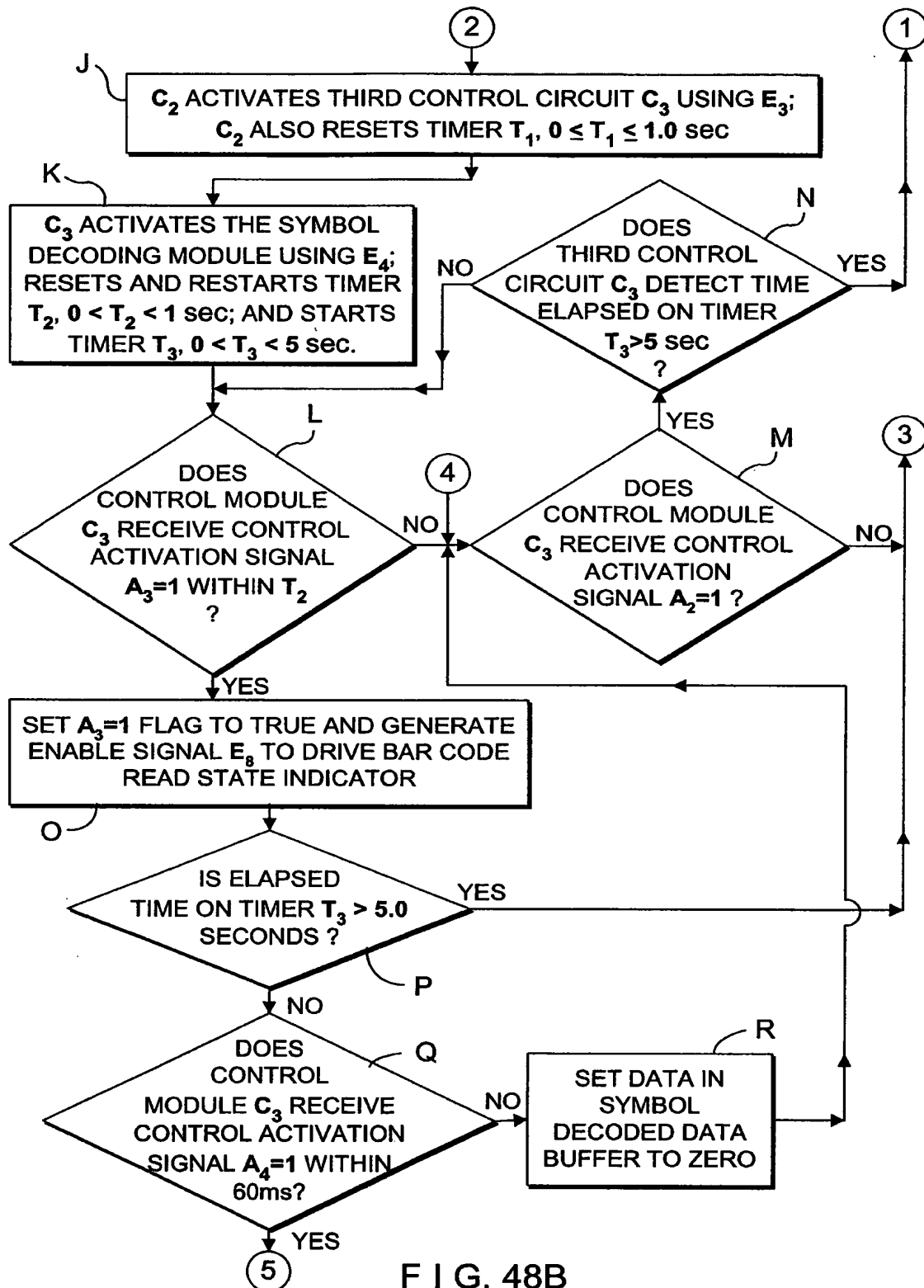


FIG. 48B

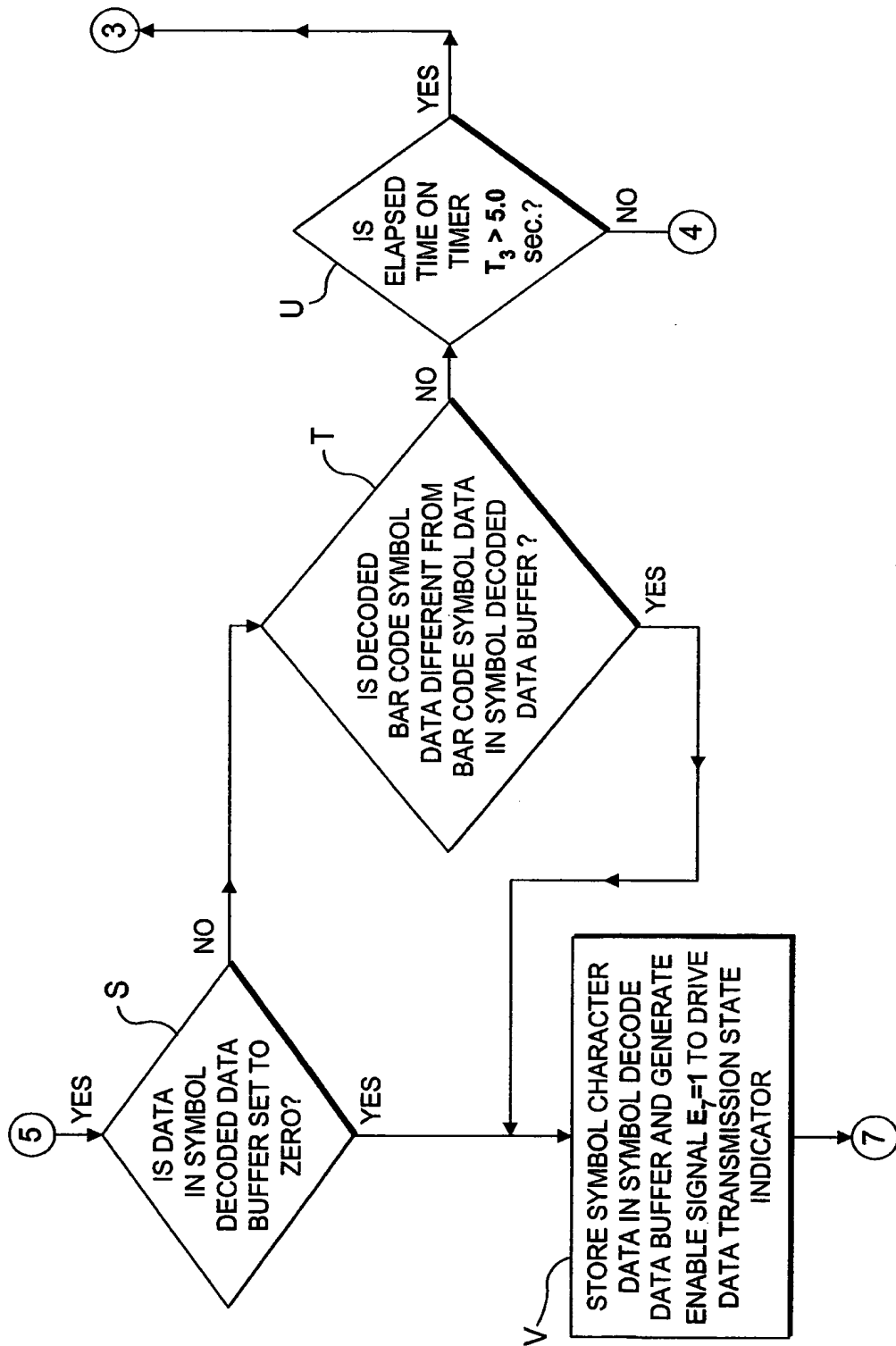


FIG. 48C1



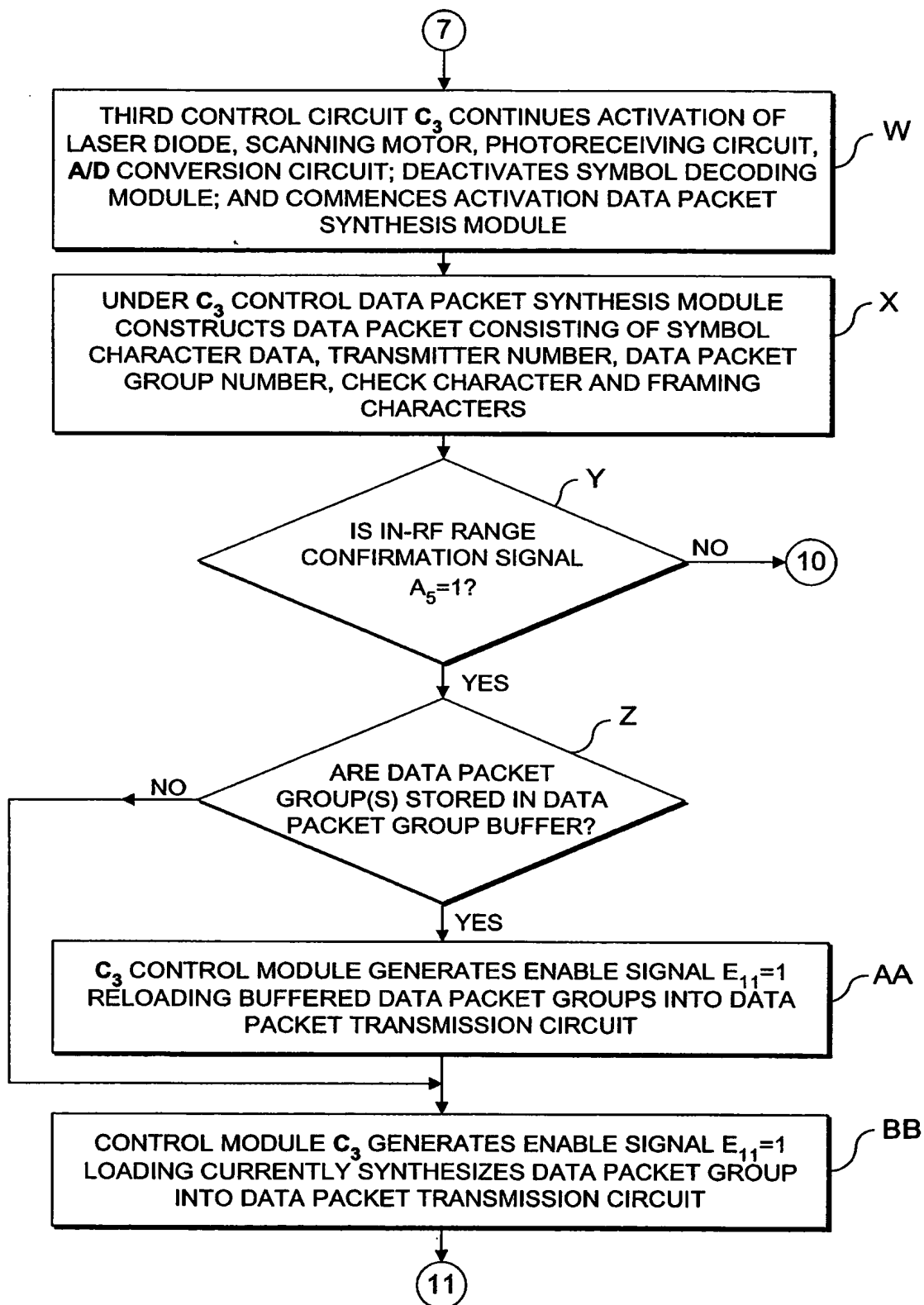


FIG. 48C2

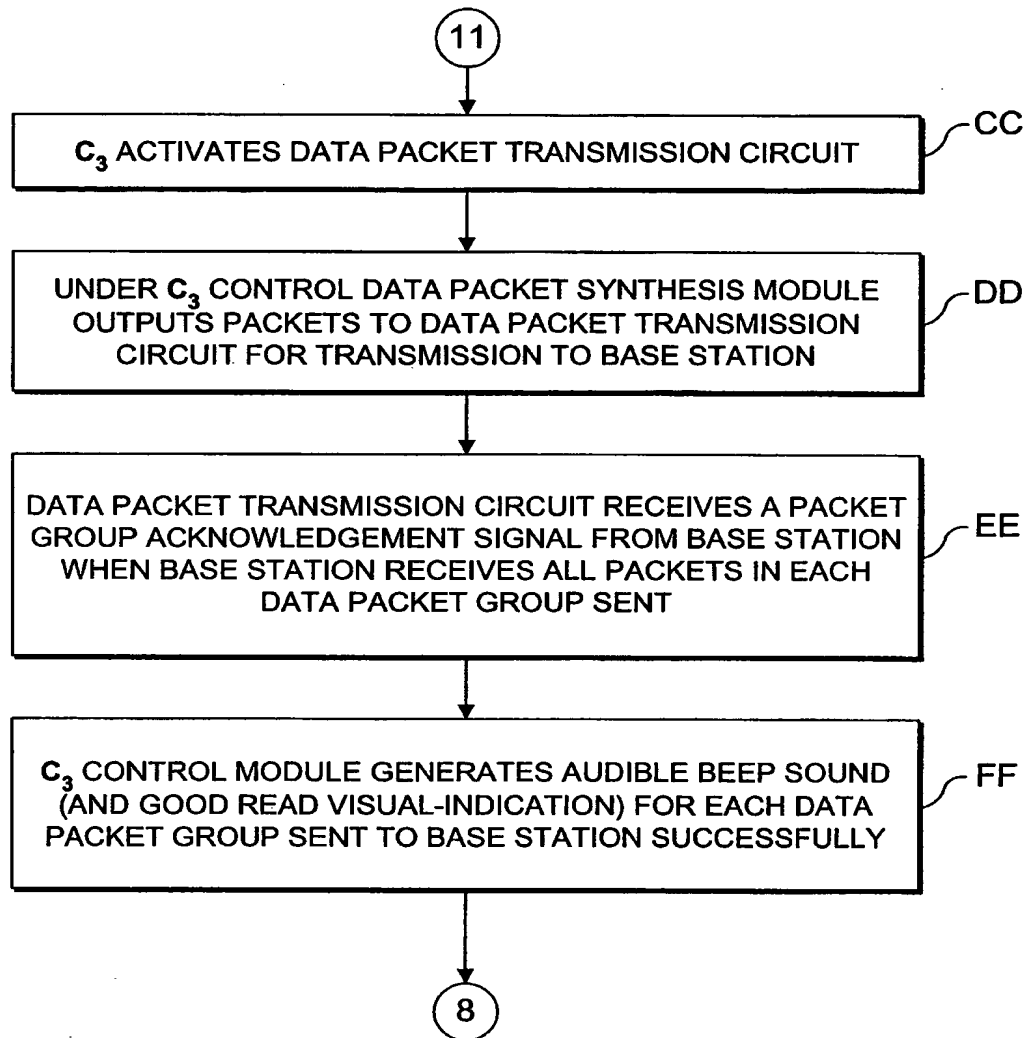


FIG. 48C3

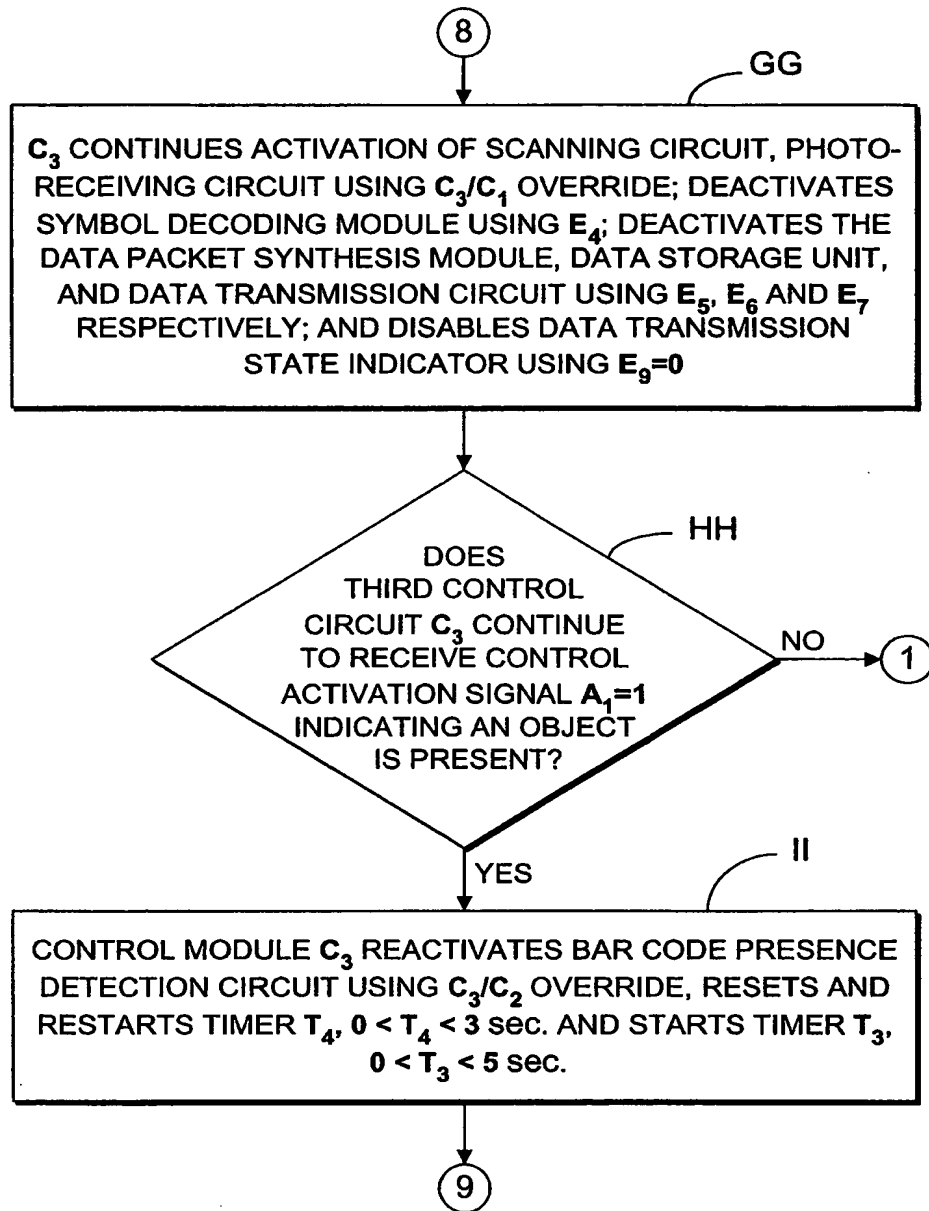


FIG. 48C4